AMERICAN LEADERS

BOOK II.

WALTER LEFFERTS

Vernon S. Wier

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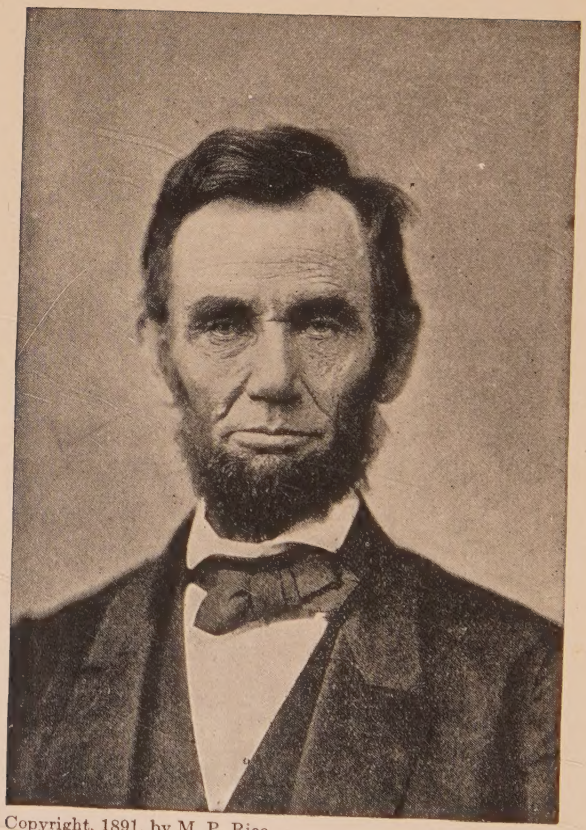

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ABRAHAM LINCOLN

From an original, unretouched negative made in 1864

AMERICAN LEADERS

BOOK TWO

BY

WALTER LEFFERTS, PH.D.

AUTHOR OF "NOTED PENNSYLVANIANS"

"Deeds, sprung of manhood's finest grace,
That envious Time shall not efface;
Deeds that proclaim a Nation's worth,
And crown the Land that gave them birth."

—FLORENCE EARLE COATES.

ILLUSTRATIONS

PHILADELPHIA AND LONDON
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PREFACE

THIS second volume of "American Leaders" brings the characters of our nation's story up to the present day and includes some who are yet living. In many ways it explains our own times and shows that heroes and heroines live near and now. It is an informal yet fairly complete survey of national history through representative biographies.

The effort of the writer has been to make this an intensely human book. Great persons were not always adults nor always great. "American Leaders" shows the child, and tells the story of his or her growth to fame. In setting forth the "how," which most books neglect, the "why" answers itself.

From first to last the aim is to set forth history for the child, not history for its own sake. Therefore, many points which appeal only to mature minds have been excluded; on the other hand, the book is rich in the details which we all love and which enable the reader to form a vivid picture.

A strong feature is the constant reinforcement of impressions by reference to characters and topics previously considered. Provision has also been made for the self-activity of the child. Questions at the end of each biography stimulate class discussion, and library suggestions lead into wider fields. When the reader finishes this book, has he received any inspiration? Is his vision clearer? Is he a better American? If so, it has fulfilled its purpose.

WALTER LEFFERTS.

PHILADELPHIA, 1919.

CONTENTS

	PAGE
Eli Whitney, the Man Who Made Cotton King	1
Robert Fulton, the Successful Steamboat Maker	16
DeWitt Clinton, Father of the Erie Canal	38
The Men Who Made the First Railroads	52
Cyrus McCormick, Who Made America the World's Granary	68
Samuel Finley Breese Morse, Sender of Words by Wire	82
Alexander Graham Bell, Sender of the Human Voice by Wire	99
Thomas Alva Edison, the Electrical Wizard	116
Lucretia Mott, the Friend of the Slave	144
Harriet Beecher Stowe, Whose Story Stirred the Nation	160
Abraham Lincoln, Preserver of the Nation	179
Ulysses Simpson Grant, Chief of the Blue	228
Jay Cooke, the Banker of the Civil War	257
Robert Edward Lee, Chief of the Gray	266
Grover Cleveland, a Fearless President	284
William McKinley, Leader of our War with Spain	297
Clara Barton, the Red Cross Angel of Mercy	311
Frances Elizabeth Willard, Leader of the White Ribbon Army	320
Theodore Roosevelt, the President of Action	331

AMERICAN LEADERS

ELI WHITNEY
1765–1825

THE MAN WHO MADE COTTON KING

"The cotton machine is a thing of unusual value."—*Letter to a friend.*

I. KING COTTON

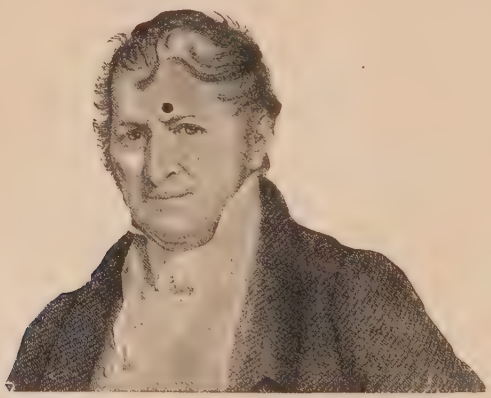
Cotton, the Wonderful Material.—There are four great clothing materials—wool, silk, linen and cotton. Which of these four is most used by you and your family? Yes, the answer is easy; cotton it is, sure enough. Lighter than wool, warmer than linen, more durable than silk, cotton is also the cheapest of the "textile" materials. More than three-quarters of the clothing worn in this country is of cotton.

Cotton has many more uses than that of being woven into goods. The armies of to-day find that cotton, when soaked in certain acids, is a powerful explosive; the automobile that shoots so swiftly along the street or road must have cotton as a foundation for its rubber tires; we put cottonseed oil on our salad, use it in frying our food, and make soap of it. What would the hospital nurse or the dentist do without cotton, or how would the engineer rub up his oily machinery without a bunch of cotton waste?

Cotton To-day and in Old Times.—A true American crop is cotton, for no other country raises so much;

indeed, three out of every four pounds of cotton in the world come from the United States. From North Carolina to Oklahoma and Texas it has long been the chief support of the farmer. Many Southern planters raise scarcely anything else. When we sing of "Dixie Land" we say "'Way down South in the land of cotton."

But cotton was not always the favorite crop of the South. Before the Revolution the Southerners thought



From Iles: Leading American Inventors, Henry Holt & Co.

ELI WHITNEY

more of tobacco and rice. After the war, inventors in England made wonderful machines for spinning cotton into thread and weaving the thread into goods; but these "spinning-jennies" and "power looms" could not get enough cotton to work upon. English mills would buy all the cotton that our Southern planters could raise; but all the cotton that the United States could send across the ocean did not amount to much.

What was the trouble? Although in the warm climate of our South any quantity of cotton could be grown, the trouble lay in getting the cotton fiber separated from the seed.

The Cotton Seed Trouble.—What we call "cotton" is the fiber, and the fiber clings tightly to the seed. The cotton planters just after the Revolution often wished that the fiber and the seed did not love each other so well. One kind of cotton, it is true, had such long fibers that the planters were able to use a machine or "gin"[1] with rollers which pulled the fiber off the seed after a fashion; but that long-fiber cotton would grow only along the coast where the breath of the salt sea could reach it. Most of the Southern cotton was the inland or "upland" kind, which had such short fibers that the rough roller-machine could not get hold of them.

Negroes, therefore, had to spend their spare time in the evenings, and whenever they could not work in the field, in picking the "lint" off the seeds. The work was so slow that a slave usually could not pick off more than a pound of lint in a day. As a pound of lint would bring about fifteen cents, you can see that a slave would scarcely pay for his meals at that kind of work. It did not seem as though the South would ever make cotton its great crop, but a boy born in the North, Eli Whitney, grew up to show the world how that was possible.

II. ELI, THE CLEVER MECHANIC

The Ingenious Boy.—Eli was born on a Massachusetts farm in the year of the Stamp Act. Like many

[1] The word "gin" is a form of "engine," meaning any piece of machinery. A clock is an engine in the old sense of the word.

other farm-boys, he was handy with tools. Every farm then had its little one-story shop where blacksmith and carpenter work and general tinkering were done. The Northern farmer depended largely on himself. When tools needed mending, he mended them; when work in wood or iron had to be done about the farm, he expected to do it.

The home shop was Eli's favorite place, and he preferred working with tools to playing with the other boys. At school the only study in which Eli stood well was arithmetic; but in the shop few grown persons could equal him. To mend broken furniture and to find out how machinery was constructed delighted his heart. His father had a handsome watch which Eli rightly thought was a wonderful piece of work, but stern Mr. Whitney would not let his son examine the inside. One Sunday Eli played sick, so was left behind while the rest of the family went to church. This was Eli's golden chance. He lost not a minute in getting hold of the watch and took it all apart. Had anything happened to the precious watch, Eli would have had a sorry time, but before his father returned, Eli had put it together again so skilfully that it ran as well as ever. Mr. Whitney did not suspect what liberties his son had taken, and it was years before Eli dared to confess.

Nails, like watches, were much more valuable then than now. They were not made in millions by machinery, as are our cut nails and wire nails, but each was hammered out by hand upon an anvil. When Eli was fifteen, his father set him to making nails, which were scarcer than usual because many workmen were in the

Revolutionary army. The shop rang from morning till night with the clang of Eli's hammer, and he beat out his nails so skilfully and so fast that he earned several dollars a day. He wished to save his money for a higher education, but fathers then had a right to the earnings of their sons until the boys were twenty-one, and it is probable that few of the dollars found their way into Eli's pocket.

The College Student. Off to the South.—After the war Eli decided that he was not satisfied to be only a good nail-maker or a good furniture-mender, but that he wanted to go to college. His father, however, was unwilling to furnish the money; and Eli himself had not enough to pay the expense. For four years he worked and waited. During part of the time he taught school. In his hours at home he made metal hatpins for the women of the neighborhood and beautiful canes for the men.

At last Mr. Whitney's heart softened, and he lent Eli the sum still needed. It was a happy young man who took the long stagecoach ride from central Massachusetts to New Haven, Connecticut, and there entered Yale College. At that time students went to college at an earlier age than they do now, but even to-day we should consider Eli rather old to begin his higher education, for he was twenty-three.

Although Eli earned a considerable amount by work while he was in college, he always found time to keep up with his studies. There were no lazy bones in his body. Both head and hands were active. Once he saw a carpenter working with some tools of a new kind.

"Let me try your tools," said he. "No," answered the workman, "you'll hurt them"; but at last Eli managed to get the handling of the precious articles. The carpenter watched, at first with doubt, but later with admiration. "There was a good workman spoiled," he exclaimed, "when you went to college." College did not take away Eli's skill with his hands, however, while it taught him to use his head to better advantage.

Four years passed by, and at the age of twenty-seven Eli graduated. What should he do now? He secured an engagement as teacher of a school in South Carolina, so, one November day of 1792, Whitney left New York in a "packet" or passenger sailing-vessel bound for Savannah. It was a trip of a week or more, and the people on board came to know each other well. Among the passengers was Mrs. Greene, widow of the famous general Nathaniel Greene who had died only a few years before.

Whitney at Mulberry Grove.—Though Mrs. Greene, like her husband, was a native of New England, her home was then on a plantation in Georgia, a few miles from Savannah. This fine plantation had once belonged to the British governor of Georgia, but when the Revolution began the governor fled and the state seized his property. General Greene fought so hard and so successfully to clear the British out of the South that the legislature of Georgia presented to him this Mulberry Grove plantation, covering thousands of acres.

With her children, the mistress of Mulberry Grove was now returning from a visit to the North. During the voyage she enjoyed talking to Whitney, for he was

pleasant and well educated. Eli had many questions to ask about the new country to which he was going, and Mrs. Greene gave him some valuable suggestions. When they arrived at Savannah, she invited the young man to spend a few days at Mulberry Grove before he went off to his school. This act of kindness on the part of Mrs. Greene proved to be a wonderful thing for Eli Whitney and for the whole United States.

COTTON-PICKING

Whitney's visit at Mulberry Grove with its beautiful situation along the Savannah River, its broad fields with a few cotton-bolls still clinging to the stalks, and its troop of fifty negro slaves to do the work, was a novel and interesting experience. He stayed longer than he intended, but he did not like to stay without making some return for Mrs. Greene's hospitality. Pay was out of the question, but he mended various articles that needed repair, made toys for the children, and for

Mrs. Greene a fine embroidery frame which delighted her heart. Eli was indeed a most valuable guest of the household at Mulberry Grove.

III. THE MARVELOUS COTTON-GIN

Face to Face with a Great Problem.—A short time after Whitney's arrival Mrs. Greene entertained a party of Southern army officers who had served under her husband. During their conversation they happened to discuss how rich the South might become if only some one would invent a cotton-gin which would strip the short fiber from the seeds of the upland cotton. Mrs. Greene listened awhile, then exclaimed: "Gentlemen, ask my young friend, Mr. Whitney. He can make anything!"

Whitney, who was in another room, was called. In a half-joking way the planter-officers explained just what was wanted. They really did not expect that the young fellow would be able to produce the needed machine. Neither did Mrs. Greene; but she smiled as she quietly said to a couple of the gentlemen: "Mr. Whitney is a very deserving young man. I have accomplished my aim, which was to bring him into notice."

Whitney, however, took the matter seriously. After the planters had left, he spent many hours considering the problem. He went out into the sheds where was stored the cotton as it came from the fields, and brought in a handful, which he closely examined. In a few days he came to Mr. Miller, who managed the plantation for Mrs. Greene, and said, "I think I can make a machine that will do the work."

Mr. Miller, who afterward married Mrs. Greene, resembled Eli in being a thrifty New Englander and a graduate of Yale College, and naturally was interested in Whitney's experiment. As Eli explained his intended machine, the plan pleased Mr. Miller, and he declared, "If you will try the experiment, I will pay all the expenses; if it succeeds, we will go into partnership." Eli agreed. A little room was given him as a shop, and he began his task.

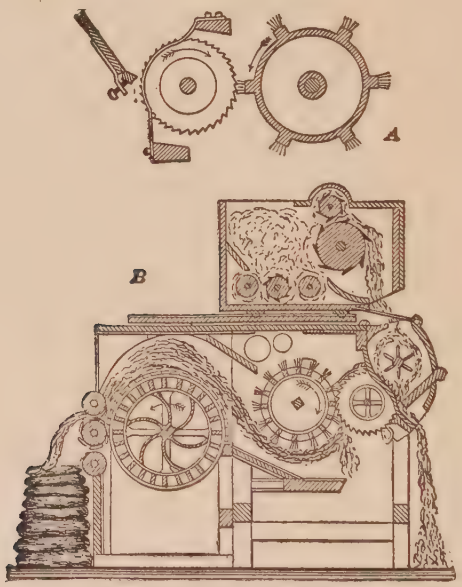
The Problem Solved.—First, Whitney fixed wire teeth into a board. He found that by pulling the cotton through them the troublesome seeds would be left behind. Next he made a cylinder with wire teeth. As the cylinder revolved, the wires came through slats in a grating. The uncleaned cotton slid down against the grating. The wire teeth caught the lint and pulled it off the seeds, which were too large to pass through the slits. When the lint was pulled off, the seeds dropped down out of the way.

The tools with which Whitney worked were few and poor. He could not find even any wire of the fineness he needed, but, looking around, he discovered a coil of heavy wire which was intended to make a cage for the pet bird of one of Mrs. Greene's little girls. This wire he heated and drew out to the fineness he wished. In about ten days a small model machine had been finished.

When Whitney turned the crank of the machine to show Mrs. Greene and Mr. Miller how it worked, the wire teeth began to pull off the cotton fiber just as human fingers would, but much faster. In a couple of minutes, however, Whitney's heart sank, for the teeth

became clogged with lint and could not do the work. That was a bad fault. Several times Whitney started the machine, but each trial showed the same disappointing result.

Mrs. Greene thought she would have a little fun at



From Iles: Leading American Inventors, Henry Holt & Co.

DIAGRAM OF A COTTON GIN

Whitney's expense. Picking up the hearth-brush, she said, "Why not use this to clean the wires?" "Thank you for the idea," said Whitney. He added to his machine a revolving brush which swept away the lint as it gathered, and the job was done. Whitney's skilful hand-work and intelligent head-work had combined to

bring about success. Long practice with tools had made Whitney able to plan and construct, in a few weeks, a machine which for years the South had vainly desired.

A planter who saw the machine offered Whitney a hundred guineas (five hundred dollars) for his rights in it, but Whitney scorned the offer. He thought no more of teaching school, for he wished to devote his time to his great invention. The next spring Eli built a large cotton-gin, to be turned by one man, which would clean as much cotton from the seed as ten men could, and would do it better. By using horse-power, one cotton-gin would do the work of fifty men.

Now it was certain that the gin would be a success. The firm of Whitney and Miller applied to the United States Government at Philadelphia for a patent. Thomas Jefferson, who was then Secretary of State, took a great interest in the invention and wrote a special letter to Whitney to get more information about it. The patent, signed by George Washington, President, was granted.

The New Machine Changes the South.—As soon as the cotton-gin came into use the South realized what a wonderful machine it was. At once cotton became a popular crop. The changes that took place in the Southern States, both for good and for ill, were marvelous. Cotton, like gold, was always desirable. Money flowed into the planters' pockets. In a good year they could make twice as much from cotton as from such crops as corn, rice or tobacco. Naturally, the South raised cotton and not much else. As the people could live easily by raising cotton, they did not care to engage in manufactur-

ing. It was left to Eli Whitney's colder Northern home to develop the great factories which in Massachusetts and Rhode Island spun and wove the cotton, while most Southerners never saw a cotton-mill.

But the greatest change of all in the South was with regard to slavery. At the time when our Constitution was adopted, the Southern people were turning against slavery. Washington, Jefferson, Madison, Monroe, Patrick Henry, all spoke against it. Although they held slaves, they would have been glad to see slavery abolished if they had known just how to accomplish such a task without disturbing the country. Even the states far south, Georgia and South Carolina, disliked slavery.

But with the coming of the cotton-gin there was no more Southern talk about freeing the slaves. The slaves were needed to raise cotton, and more cotton, and still more cotton. Millions of fingers were required to pick the white ripe bolls which fed the ever-hungry cotton-gin. Now a slave could make much money for his master, so the cotton states eagerly bought all the slaves which the states north of them would sell. When steam-power finally was used to turn the cotton-gin, each machine was equal to the labor of a thousand negroes in separating the fiber. The planters could not find enough new land or enough slaves to satisfy their desires for cotton-raising. Before Whitney died, he saw the cotton-planters moving westward and establishing slavery in new portions of the United States to keep the cotton-gins working.

Whitney's Disappointments. His Northern Factory.—Did Eli Whitney and his partner grow tremendously

rich by their popular cotton-gin? We shall see. There is such a thing as grasping at too much and losing thereby. The partners were not satisfied to sell their machines at a profit; they wished only to rent out the use of them. At first as a rent they asked for one pound of cotton out of every three which the machine cleaned; when that was refused as being too high, they wanted a money payment just for the privilege of using a cotton-gin.

A COTTON SPINNING MILL

The cotton-growers rebelled. Other persons made improvements in the cotton-gin and took out patents on these improvements. Whitney and Miller called upon the law to protect them, and after years of dispute they were paid $90,000 by the states of North Carolina, South Carolina and Tennessee. This sum, with the payments which they had already received from private persons, made a considerable amount. Yet Whitney was deeply disappointed. He never forgave the Southern people for their objection to his charges.

Eli Whitney was too clever a man, however, to depend on one invention. He left the South and set up a factory in New Haven, where he made muskets for the United States army. Beginning with only a few workmen, he soon enlarged his shop until he had an establishment that employed hundreds of men. It is said that he was the first manufacturer to make "standard" parts to his guns. Each piece of a gun was made on a machine instead of being turned out by hand. If, therefore, a part of a gun was broken, a new part, which would be sure to fit, could be gotten by sending to the factory. These parts could even be kept in stock wherever the guns were used.

Whitney supplied many of the muskets which our troops used in the War of 1812. He carried on the business in New Haven until his death in 1825, and made a large fortune. Had he lived thirty years more, he would have seen North and South ready to fly at each other's throats on account of slavery. Even before his death there were threatenings of the storm that came in 1861. It was the cotton-gin that separated so widely the slave-holding, cotton-growing South from the cotton-manufacturing North with its paid labor by free men.

Now the storm of the Civil War is over, and the North and the South no longer are at odds. Cotton still is the great crop of the South, but with this difference, that there are hundreds of cotton-mills in the cotton-states to give prosperity to the people. Cotton-gins are more numerous and busier than ever. The history of Eli Whitney's cotton-gin is really the history of the South since the Revolution.

FOR DISCUSSION AND LIBRARY WORK

1. What noted soldier of the Revolution was General Greene's neighbor in Georgia?
2. How do inventors now make profits from their inventions?
3. Do you think Eli Whitney was right in his charges for the cotton-gin? Why?
4. Can you make a United States cotton-map?
5. Could the world get along well without our American cotton? Explain your answer.
6. What is meant by the saying "Cotton is King"?
7. Name any twentieth-century things that are made on Whitney's "standard" plan.
8. Prove the truth of the last sentence in the story of Eli Whitney.

NOTE.—These questions and topics are not adapted to formal review purposes, but indicate possible discussions and simple investigations which will deepen acquaintance with the subjects of this biography, add to their reality, and give power of acquiring information and expressing thought.

ROBERT FULTON
1765–1815

THE SUCCESSFUL STEAMBOAT MAKER

"To America I look for the perfecting of all my plans."—*Letter from Paris to a friend.*

I. FROM LANCASTER TO LONDON

The Boy with Ideas.—During the Revolution, Mr. Caleb Johnson taught school in the town of Lancaster, Pennsylvania, and had among his pupils two girls, Peggy and Belle Fulton. "May we bring our brother to school to-morrow, master?" asked the girls one day. "Robert is eight years old, and can read and write already, for mother has taught him." "Yes, but you must not forget the week's fee," said Master Johnson.

ROBERT FULTON

Next morning the girls appeared with a dark-eyed, curly-headed fellow, tall for his age, who thus began a stay of several years in the school. Robert proved to be a bright boy in his studies when he chose to

pay attention, but often and often his thoughts wandered far away from the school-room. This provoked Master Johnson very much. Once he rapped Robert over the knuckles with his ruler, saying, "There, that will make you do something!" "Sir," cried Robert, "I came here to have something beaten into my brains, and not into my knuckles."

If Caleb Johnson could have known what was going on in the brain under that curly pate, he would have become acquainted with some thoughts wonderful on the part of a child. Mrs. Fulton remarked to the teacher that Robert was not doing so well in his studies as he should. "Well," Master Johnson answered, "I have done my best, but Robert says his head is so full of new ideas that there is no room in it for learning from dusty books."

Pencil and Paints.—Three things Robert loved to do, and unfortunately he could do none of them in school. He loved to draw, he loved to study machinery, and he loved to make things.

"Robert Fulton, why are you late at school?" sternly asked the teacher one morning. "I have been at Nicholas Miller's shop making a lead-pencil," explained the lad, "and it is the best pencil I ever had." When Master Johnson looked at the pencil he found that the lead was hammered out into shape so carefully and fitted so neatly into its wooden case that he let Robert off without a scolding.

With his new pencil Robert drew portraits of his brother and sisters and other playmates. He copied on paper all the machines he was allowed to examine. But

the pencil had no colors in it, and Robert longed to be able to paint.

At last one of Robert's boy friends brought to school the rare prize of a paint-box. "Please let me mix some colors," begged Robert. His friend was generous, and let Robert try his hand. Then the boys found old dry mussel-shells along the creek. "We'll each paint a picture on the inside of a shell," said the owner of the paint-box, "and see which is the better one." Robert's picture was so far the better that his friend handed over the whole painting outfit. Robert nearly went wild with joy, and for a long time painted pictures in every spare moment.

Fulton's Home Town.—The new paint-box, however, did not take away Robert's love for machinery. Lancaster was an interesting town for a boy who liked to "watch the wheels go around." When the British were about to capture Philadelphia, Congress moved out in a hurry and took up its quarters in the Lancaster Court-house.[1] That action made Lancaster, while Congress remained, the capital of the United States. Many of the rifles and blankets for the American army were made there under the eye of Congress, and many a Continental soldier wore a uniform that was woven and tailored in a Lancaster shop.

At the doors of the large workshops stood guards to keep out idle sight-seers, for the labor was so important that it was not allowed to stop night or day. Even on Sundays the men continued their tasks in order

[1] A monument in Market Square, Lancaster, marks the spot where the court-house stood.

to give the fighters plenty of supplies and munitions. One boy, however, was allowed to have a free run of the shops, for every one knew that Robert Fulton would not hinder the work. Machinists would say, "Bob, draw me that part of the machine that I was talking about," and "Bob's" pencil was always ready to make a clear drawing. In the shops Robert was as much at home as a duck in the water.

The Paddle-Wheel Boat.—One of the young fellows who worked in the shops, Christopher Gumpf by name, took a great liking to inquisitive Robert. Christopher was eighteen years old and Robert was but fourteen, but they became chums, and had many fine times together. One of their pleasures was to go fishing on Conestoga Creek near Lancaster with Christopher's father, who owned a flat-bottomed boat.

The creek was shallow and rocky in many places, and Mr. Gumpf used a pole instead of oars. When the three fishermen went on an excursion it was the task of the boys to pole along the heavy boat. It was no easy task, under the hot sun. Robert, who was the youngest and weakest member of the party, often grew very tired. His brain shaped a plan to move the boat more easily.

During a week's visit to an aunt out in the country Robert spent most of the time in making the model of a boat to be propelled by paddle-wheels on the sides. It worked, but when Robert tried to take the large model home there was no room for it in the carriage, so it was put into his aunt's attic to await Robert's next visit. Robert never asked for it again, but many years later,

when his steamboat became famous, the model came down from the attic to the parlor, where it was shown as the greatest treasure of the house.

As soon as he returned to Lancaster, Robert, with Christopher's help, went to work upon Mr. Gumpf's boat, and soon the farmers and fishermen on the banks of Conestoga Creek smiled to see big splashing paddle-wheels moving the craft along. While one person sat and turned the crank which operated the wheels, another comfortably steered by a rudder. It was much less toilsome way of boating than the poling had been. Robert Fulton was already improving navigation.

Robert Starts Off to Seek His Fortune.—In Lancaster lived a clever man named William Henry, who had made a paddle-wheel boat before Robert was born. Mr. Henry's boat, however, was to be moved by steam and not by boy-power, for Mr. Henry had thought deeply about the uses of the steam-engine which James Watt had invented in England. Henry's boat had been tried on Conestoga Creek, but somehow the machinery did not work well. By some accident the boat sank, and Mr. Henry, disappointed, left it to decay. Perhaps Robert received his idea of the paddle-wheel boat from this inventor, and perhaps he too planned, even at that early time of his life, to make a craft that should move by steam.

At any rate, Robert often visited Mr. Henry's home to study some pictures. These pictures had been painted by Benjamin West, a famous American artist then living in London, who had begun his success in Lancaster. Robert had already painted signs for vari-

ous inns and people had admired his work. "I intend to be a portrait painter like West," announced Robert.

Accordingly, at the age of seventeen, Robert Fulton said good-bye to his widowed mother, who had worked hard to support him as a child, and took the stage-coach for Philadelphia, seventy miles away. It was a large undertaking for the young fellow to make a living by pencil and paints in a large city, but in one way or another he did so, meanwhile studying with the artist Charles Wilson Peale to become a fine portrait and miniature painter.

The Successful Artist.—By the time Robert was twenty he had gained his end, and was able to devote all his time to real art. By his cheerful and happy nature he had made many worth-while friends. After a time Fulton had the good fortune to meet the greatest citizen of Philadelphia, Benjamin Franklin, who was just about to go back to France to represent again the United States. Franklin liked the tall slender curly-haired young painter with the pleasant manner; he examined Fulton's work and found it good; so he ordered a portrait of himself from Robert and introduced him to some leading men.

Now it became quite the fashion to have one's portrait painted by Robert Fulton, and money came fast to the painter. He decided to go over to England to study art; but before he went he wished to make sure that his mother would be comfortable and happy. In the western part of Pennsylvania[2] Fulton bought a

[2] The farm was on Cross Creek, Hopewell township, Washington County.

farm and settled his mother, sisters and brother there, where they would have a pleasant home and be near relatives. Then, with a mind at rest, he sailed for England.

II. WONDERFUL INVENTIONS

From Painter to Inventor.—As soon as Fulton, then twenty-two, arrived in London, he called at the splendid home of Benjamin West and presented to him a letter of introduction from Franklin. When West had read it, he heartily welcomed the young American who had been a Pennsylvania farm-boy like himself. "Stay here until you find suitable lodgings," said he, and Fulton gladly remained for a time. Even after leaving the house of West, he came back almost daily to paint under West's direction.

But notwithstanding West's help, making a living in a foreign country was hard. Fulton soon spent the money he had brought with him, and not until he had been in England more than four years did he earn enough to get out of debt. "How many a silent solitary hour," he afterward wrote, "have I spent anxiously pondering how to make funds to support me." After all, Fulton was a good painter, but not a great one. Perhaps as he learned more about art he was sensible enough to see that. At any rate, he gradually left off painting and devoted himself to the other beloved occupation—invention.

Fulton moved to Birmingham, a busy iron-making city where he could study all sorts of machines, and lived there for many months. He became a "civil engi-

neer," found profitable employment, and patented several machines on which he made money. At this time canals were becoming popular in England. Fulton thought that for hauling goods they much surpassed turnpike roads, and he spent a great deal of time planning new canals. To carry canal-boats over the mountains he invented inclined planes.[3]

The Idea of a Free Ocean.—Having secured from England patents on various inventions to improve canals, Fulton went to France to patent and introduce his inventions there. France and England were then at war, and maintained large fleets of warships to destroy each other's merchant vessels.

Not only was Fulton an artist and inventor, he was also a statesman. Often had he reflected upon the best course for nations to follow. "Nations should not be selfish," said he, "for the hurt of one is the hurt of all. Trade on the ocean should be free. Wars are great mistakes. Let nations spend upon education and useful arts the money which they now lavish on fleets and armies."

Instead of allowing freedom of trade upon the ocean, the nations of Europe were trying to bar each other from it. Fulton feared that the United States would feel compelled to imitate them in building a great war-fleet which would burden the country with taxes for no good end. He set himself to invent a cheap way of making warships useless.

The Torpedo and the Submarine.—Into Fulton's mind

[3] Such planes may still be seen on at least one canal in America, the Morris and Essex, which crosses northern New Jersey.

came the idea of the moving torpedo. He thought that by clockwork a machine carrying a quantity of powder

FIRST SUBMARINE VESSEL THAT CROSSED THE OCEAN

could be sent through the water to blow up a vessel. "If we can thus destroy warships far more easily than

they can be built, perhaps the nations will stop building them," he said. But Fulton could not make his torpedo move as he wished. Then he invented a "plunging-boat" which could sail upon the surface or dive below it, and by this means he hoped to fasten torpedoes on the bottoms of ships until the torpedoes exploded. Considering that it was such an untried invention, the diving boat worked well. Fulton called it the "Nautilus."[4]

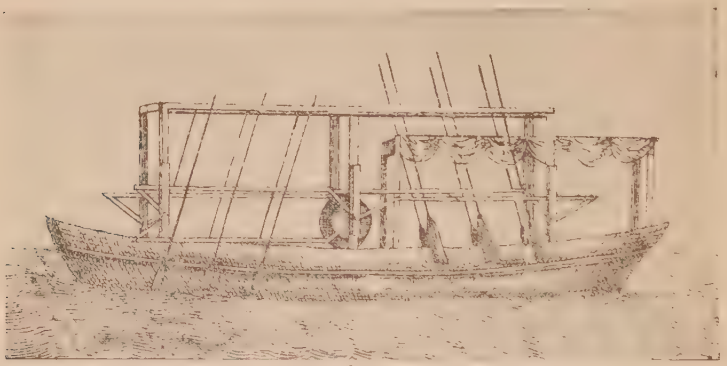
The cigar-shaped "Nautilus" was small, only twenty feet long, and was moved by a propeller whose power came from a crank turned by the crew. Guided by a compass, the "Nautilus" could go in any direction. On one occasion Fulton remained in it beneath the water for six hours, taking in fresh air through a little tube which could scarcely be noticed by any one upon the surface of the ocean. He had also a tank containing compressed air which he could use as needed.

Fulton promised the French naval officers that by the aid of the "Nautilus" he would blow up with "submarine bombs" the British ships that were then blockading the French coast. The English, however, got wind of Fulton's intention, and though he watched for a whole summer, their ships kept at a safe distance. The French officials were disappointed and finally dropped the matter.

The Steamboat Partnership.—At this time Fulton, who was becoming famous, met Robert R. Livingston, a rich

[4] The real Nautilus is a kind of cuttle-fish with a shell. By drawing in or letting out air it can sink or swim at its pleasure. Jules Verne, in his wonderful story "Twenty Thousand Leagues Under the Sea," makes Captain Nemo call his submarine the *Nautilus*.

man of New York, who had come over to represent the United States in France. Livingston was greatly interested in steamboats; in fact, he already had built one near his home on the Hudson, but it had proved a failure. The two men discussed the best ways of constructing steamboats, and Livingston was so pleased with Fulton's energy and cleverness that he thought, "Here is the man I am looking for."



JOHN FITCH'S STEAMBOAT

Fulton and Livingston agreed to join forces to make a successful steamboat. The idea of the steamboat was nothing new, as many men in Europe and in the United States had actually built boats moved by steam. For some reason or other, however, the steamboats had never come up to expectations.

John Fitch of America had been probably the most successful of steamboat inventors. Sixteen years before Livingston and Fulton made their agreement in 1802, Fitch built a steamboat at Philadelphia and ran it on the Delaware. For four years he continued his

experiments, and at last managed to run his boat all one summer between Philadelphia and Bordentown, New Jersey. But people would not travel in that manner. Fitch spent every dollar he owned, and gave up the attempt.

The Twice-Built Steamboat.—The combination of Fulton and Livingston, however, strongly promised success. Fulton's knowledge of machinery was far greater than Livingston's, but Livingston had wealth and influence which could bring the invention to public notice. Fulton did the calculating, planning and directing, and by the spring of 1803 the strange-looking boat with its machinery exposed to view floated at a wharf on the Seine River.

The day was set for a trial trip, but the night before the trip was to be made a great storm broke over Paris, and dashed the water of the river into high waves. At daybreak the watchman in charge of the boat rushed into Fulton's bedroom. "Monsieur!" he cried. "The boat has broken into pieces and lies at the bottom of the river!" This was only too true. As the waves tossed it about, the light hull had broken apart.

Fulton hastily dressed and rushed to the spot. Nothing of the boat could be seen, but he immediately hired workmen, and labored along with them for twenty-four hours, soaking wet, without food or rest, until the precious engine and the other machinery were recovered from their muddy resting-place. At the end of that time Fulton was so exhausted that a cold settled on his lungs, which were weak forever after—but he had saved the valuable parts of the craft.

Again Fulton directed the building of the boat, and in a few months had the pleasure of seeing it move by its side paddle-wheels against the current of the Seine about as fast as a man could walk. The invention was successful. Did Fulton think then, I wonder, about the paddle-wheel boat in which he and his chum Christopher had navigated the Conestoga? Although every one admitted that Fulton had accomplished his aim, the French government showed no interest. Livingston now wrote to his friends in New York, telling them of the success of the steamboat. Through their influence New York passed a law which gave the partners the sole right to navigate steamboats on the waters of the state. They were to have this right for twenty years, provided they would at once build a steam vessel which should travel at least four miles an hour against the current of the Hudson.

Fulton Refuses a Great Offer. Return Home.—Just then the English government, which knew of Fulton's torpedoes and submarine boat, thought that it would be well to ask him to cross the channel to England and show what he could do along those lines; and Fulton agreed. England called herself "the mistress of the seas." It could not be expected that she would sympathize with the inventor's plan of driving all warships off the ocean. For keeping his invention secret, however, so that no other country could destroy the great British navy, England was willing to pay him well. Fulton was an American first, last, and all the time. He declared, "I never will consent to keep my inventions secret should the United States need them.

Were you to grant me twenty thousand pounds a year, I would sacrifice all to the safety and independence of my country."

Affairs with England came to no result on account of Fulton's refusal, but as he had made a contract with the government he received for his experiment a fair sum of money. Now he was ready to return to his native land. How different was his return from his departure nearly twenty years before! He went away from his country an unknown young fellow with two hundred dollars in his pocket; he returned a famous man of middle age with prospects of making a fortune.

III. SUCCESS AND FAME

"The Clermont."—No rest did Fulton wish to take, for he was anxious to begin work on his American steamboat. President Thomas Jefferson asked him to make a report on a certain canal, but Fulton replied that he was too busy to undertake the affair. At Corlear's Hook on the East River the steamboat began to take shape. The engine had already been bought in England. By the contract Livingston was not supposed to advance any more money, and the expense of finishing the vessel fell upon Fulton, who had to borrow from his friends.

At last the boat was completed, and exactly four years after Fulton's French steamboat had moved up and down the Seine, his American steamboat made its trial trip on the East River at New York. Fulton probably chose the date so as to celebrate on the same day the first trip of each vessel. The steamboat's name was

the "Clermont," in honor of Livingston's beautiful country home on the banks of the Hudson a few miles south of the city of Hudson.

After a week more of preparation the "Clermont" was ready for a start in earnest. On a beautiful, clear day in August, 1807, about forty invited guests, almost all relatives or intimate friends of Livingston and Fulton, assembled at the steamboat wharf [5] on the North River.[6] The guests saw a queer-looking craft, long and narrow, with sides almost straight up and down. The paddle-wheels on the side were uncovered, and the English engine, with its boiler set in masonry, stood open to the weather. On the two masts of the "Clermont" sails could be hoisted in case the Hudson tide proved too strong for the engine.

Only one of the ten daily papers in New York city had said anything about the attempted trips, but crowds of people were on the spot to see "Fulton's Folly" fail. Even the guests of the day had many fears that the voyage would never be made.

A Double Triumph.—The signal to start was given. The deck-hands threw pine wood into the furnace; smoke and sparks gushed from the tall, thin stack, and the boat began to move. Before she passed from sight of the wharf, however, the "Clermont" stopped. "I told you so," whispered some of the guests. "It was a foolish scheme"; but Fulton stepped up to a place where

[5] The wharf was near the old States Prison, in Greenwich Village, New York City.

[6] The Hudson River at New York, ever since the days of the old discoverers, has been called the North River, the Delaware being the South River. The name North River distinguishes the Hudson from the East River, which leads into Long Island Sound.

all could see his tall form. "I do not know what is the matter," said he, "but if you will be quiet and grant me half an hour, I will either repair the trouble in that time or give up the trip." In less than the half hour Fulton had discovered what was wrong and the "Clermont" went on.

Happiness now prevailed on board. Though progress was only about five miles an hour, it seemed swift to the delighted ladies and gentlemen. As the sun

ROBERT FULTON'S STEAMBOAT, "THE CLERMONT," 1807

dropped low the vessel passed through the beautiful Highlands. While the party sang Fulton's favorite songs they were delighted to hear the music echo from the mountains rising steeply out of the river.

Fulton was probably the happiest person on board. Instead of complaining now or doubting, every one paid him compliments and listened eagerly to his words. Livingston had told the guests, "This will be something to remember all your lives." They found his promise was correct, and they knew that to Fulton must be given the chief honor. One of the ladies afterward said,

"There were many distinguished men and many fine-looking men on board the 'Clermont,' but Robert Fulton surpassed them all. That son of a Pennsylvania farmer was really a prince among men. He was as modest as he was great, and as handsome as he was modest."

Night came on, but still the "Clermont" went on her way, resembling, so it was remarked, "a backwoods saw-mill mounted on a scow and set on fire." Flames from her stack shot high into the darkness, and the craft that met the "Clermont" could not understand what was this roaring fiery monster that moved against wind and tide. Some of the timid sailors ran their boats on shore and took to the woods in fright; some who had not time to do this retreated below deck, shut themselves in, and let their vessels drift as they might until the terrible danger passed. On the river bank many of those who viewed the sight fell upon their knees and prayed for protection against this dreadful thing.

At one o'clock in the morning, as the "Clermont" drew near Clermont, forty miles below Albany, Livingston, as a crowning touch to the voyage, announced the engagement to Fulton of one of the ladies on board, his cousin Harriet Livingston. Had the "Clermont" proved a failure, the announcement might never have been made, for Harriet's father was rich and proud, and no unsuccessful man could hope to marry his beautiful daughter. It was a double triumph, and the greatest day in Fulton's life.

Passenger Travel Begins. "Fulton's Mill."—The party broke up at Clermont, but at nine o'clock the next morn-

ing Fulton and Livingston again went on board, and reached Albany as the afternoon drew to a close. The governor of New York and a multitude of citizens came to the wharf to view the wonderful boat.

Fulton hung a sign over the side of the "Clermont," announcing that on the next day she would start back to New York. The fare he charged for the one hundred and fifty miles was seven dollars, the regular amount demanded by the passenger sloops. Only five persons had courage enough to try the new means of transportation.

Two weeks later the "Clermont" made her first regular trip up the Hudson. Fourteen brave passengers went in her, though one of them was warned by a doubting Quaker friend. "Wilt thou risk thy life in such a concern?" questioned the Quaker. "I tell thee she is the most fearful wild-fowl living, and thy father ought to restrain thee."

On this trip the passengers heard a shout from a rowboat alongside. In the boat was a miller, hair and clothes dusty with meal. He had evidently missed seeing the "Clermont" on her previous voyages or even hearing of her, and now he had rushed away from his mill on shore, thinking that another mill with its paddle-wheels was splashing upstream. "I never thought I would see a mill go up the river," said he. When he climbed aboard, a jolly passenger offered to show him over "Mr. Fulton's mill." "But where are the grindstones?" queried the inquisitive miller. "That the master has not yet told us," answered the passenger, as he pointed to Fulton. "But wait till we come back

from Albany with our load of corn, and you will see the meal fly." How everybody laughed as the simple-minded miller rowed back to shore!

Steamboats Multiply. Fulton's Home.—During the winter Fulton enlarged the "Clermont," and the next season she cleared sixteen thousand dollars. Now water-travel by steam-power had regularly begun in America, several years before Europe made real use of it. Soon Fulton had three steamboats in operation. The new vessels were called the "Car of Neptune" and the "Paragon." Besides these, Fulton built steam ferry-boats to ply across the North and the East Rivers. The New York street which crosses Manhattan Island between these two ferry-wharves has been given Fulton's name.

Other rivers presently found their waters invaded by the steamboat. Four years after the "Clermont" began her voyage, a steamboat made the journey from Pittsburgh to New Orleans. The many emigrants to the West found their travel made safe, swift and sure by the steamboat. After a time an American steamboat, the "Savannah," was the first to cross the stormy Atlantic.

With the profits of his own New York steamboats Fulton made a home for himself and his lovely wife in New York city. There, on Battery Place, he could look out over the sparkling waters of the harbor. The house, as we might expect of an artist's home, was hung with many pictures. The guests were always served from a dinner set of fine china, bearing the coat of arms of the United States. This was a gift from his friend,

Thomas Jefferson. In the evenings Mrs. Fulton would often bring forth her harp and entertain her husband by playing the melodies he fancied, while their four children listened also with delight.

The Great Steam-Battery. Its Builder Dies.—When the War of 1812 began, the commanders of the British frigates remembered Fulton's torpedoes and his submarine boat. They approached the American coast with great caution, and tried to learn where the inventor spent his time and what he was doing. At first Fulton was too busy perfecting his great invention to plan ways of attacking the English, but toward the end of the war he designed the first steam war-vessel in the world.

This vessel was really a floating battery, carrying heavy guns which discharged red-hot shot to set the opposing ships on fire. The sides of the wooden craft were almost five feet thick, so that it was nearly impossible for shot to pierce them. Doubtless, this vessel would have had great effect in keeping hostile ships away from that part of America, but before it was finished, war had ended.

Fulton never saw the completed vessel. During the late winter he visited his works at Paulus Hook, now Jersey City, where his trained men were building the marvelous floating fort. For three hours he stood in the cold and rain. On his way to the ferry-boat which was to take him home he walked over the river ice, through pools of water. Though ill from this exposure, he became so anxious to know the progress of his battery that he ventured on a carriage ride to the works.

Pneumonia set in, and in a few days Fulton had ceased to live. The law-makers of the state wore mourning for six weeks. As his body was carried to its grave in Trinity Churchyard, where Hamilton had been laid eleven years before, a greater crowd of citizens assembled than had ever been seen at any funeral in the city.

Fulton's True Fame.—People think of Fulton mainly in connection with the history of the steamboat, and

THE GEORGE WASHINGTON, THE SHIP WHICH CONVEYED PRESIDENT WILSON TO THE PEACE CONFERENCE.

many have credited him with being its inventor. As we have seen, Fulton neither invented nor built the first steamboat. It is his fame that through his own industry and the help of his friend Livingston he made the steamboat *successful* as a means of travel. Few persons, however, have heard of Fulton's endeavors to improve canals and extend them or of his many inventions. His plans to do away with ocean warfare and with the burden which great navies lay upon the people are almost unknown.

Torpedoes and submarine boats have been vastly improved since Fulton's day, and the Great War saw their common use. They have not yet driven warships off the seas, as Fulton hoped. The jealousy of nations still increases fleets and armies. But the day may yet arrive when the only fleets of the world will be those of peaceful commerce, and when the money which nations formerly wasted on rival warships shall be applied to better purposes. On that day Fulton's dream will be fulfilled.

FOR DISCUSSION AND LIBRARY WORK

1. How does the lead-pencil you use differ from that which little Robert Fulton made?
2. Major John André was an English prisoner in Lancaster while Fulton lived there. What sad news about André might Robert have read a few years later in the Lancaster papers?
3. Is there any reason why an inventor should be an artist too?
4. Find out what kinds of machines Fulton invented while living in England.
5. What other American inventor received his chance in life through old-time hospitality?
6. What are some of the pictures painted by West? Are any of his pictures found in this country?
7. How did the *Clermont* differ from some of the river steamboats that you know?
8. What are the special meanings of "Car of Neptune" and "Paragon"?
9. In the long story of Fulton's torpedo experiments find out how he planned to attack the hostile ship.
10. How have torpedoes been improved since Fulton's time?
11. What new things about submarine boats could Fulton learn today if he revisited this world?
12. Do you think Fulton was right when he imagined that torpedoes and submarines could drive navies off the ocean? Explain your answer.

DE WITT CLINTON
1769–1828

FATHER OF THE ERIE CANAL

"The whole republic ought to be bound together by the golden ties of commerce."—*Speech of Governor Clinton to the New York Legislature.*

I. THE WATER-PATH TO THE WEST

Water Roads and Land Roads.—Before Robert Fulton's steamboat made travel on inland water swift as well as easy, canals were the best means of carrying passengers and goods from place to place. The people of Holland and France had shown the world what benefits could come from canals. If you had been obliged to ride horseback over the muddy, rocky, stumpy roads of a hundred years ago, while you were exposed to all the bad weather that occurred, you would think that riding in a canal-boat was great comfort. Would you like it if the goods you bought had to be painfully carried on pack-horses for many miles through the forest, and on that account they were high-priced as well as scarce? I think you would long for a canal-boat.

Though the European people had many canals, the Americans before 1800 had scarcely any; but after our government became firmly established there was a call for canals in America. When George Rogers Clark, Daniel Boone, and the rest of the brave sturdy backwoodsmen had conquered for the United States the country beyond the Appalachians, it seemed far off

indeed. It was necessary to tie those western lands by roads to the lands east of the mountains. Land roads, however, were hard to keep fit for travel, and were rough at the best of times. Could there be a water road across the mountains?

DE WITT CLINTON

The Mohawk Canal Route.—The plan of such a waterway seemed impossible. How could water be brought over the mountains? Of course, there were locks in the canals of the Old World, but could locks be made large enough or could there be enough of them to carry boats across the Appalachian highland? There chanced, however, to be one place where there was a break in that highland—that was in New York state. Look at the

map, and you will see the Mohawk River flowing east to join the Hudson near Albany. The Mohawk flows through a valley which separates the Adirondack Mountains from the Catskills. Here was a natural road to the west, leading toward the Great Lakes.

Many persons, George Washington among them, thought this valley a fine place for a canal. The long-settled country on the east and the new country on the west, would thus be connected. It was not certain, however, that a canal actually could be built, and it was very doubtful, were the building of it possible, whether money enough to pay the expense could be secured. The men who solved the problem, convinced the doubters, and carried the canal to success were Governor De Witt Clinton and his engineers.

II. PUSHING THE CANAL THROUGH

Clinton, the Young Lawyer.—De Witt Clinton came from a well-known family of New York. He was born in the southeastern part of the state, not far from the spot where the United States Military Academy at West Point now looks down upon the Hudson. His father had been a general during the Revolution, and had been fortunate enough to see General Lincoln receive the sword of Cornwallis at Yorktown. De Witt Clinton's uncle was twice elected Vice President of the United States. When the young man was ready to start in life, therefore, opportunities were at his command, but his life proved him worthy of them.

At the age of fifteen, having been prepared in one of the old-time academies, De Witt was told by his

father, "You will soon be sent to Princeton College." Some of Mr. Clinton's friends heard that De Witt was to go to Princeton. "Cannot you send him to a college nearer home?" said they. "Here is King's College in New York City, where Alexander Hamilton made such a good record. Its work was broken up during the Revolution, but now it is starting again, and as it would never do to keep the old name, we will call it by a patriotic title, 'Columbia.' Why not send him there?" Mr. Clinton then decided that De Witt should go to Columbia.

After graduation, De Witt Clinton "read law" and soon became well and favorably known. Though never an orator like Hamilton, he was a clear and direct speaker. People said, "Clinton knows what he is talking about." When his tall form arose in a meeting, every one looked with respect at the man who never spoke unless he had something to say, and then said it in excellent manner.

Clinton Grows Interested in the Canal Plan.—Clinton became a member of the New York legislature. While in office he was visited by a committee who asked him to help along the plan of a canal from the Hudson to Lake Ontario and Lake Erie. "This," said the committee, "will open up the western part of our state, which is almost a wilderness, and will be a fine thing for every one. The goods of New York can then be exchanged for the grain, wool and furs of our western country near the Great Lakes."

"I have never thought much about the subject," said Clinton, "but I shall look into it." He did so, and

as he studied the plan he became deeply interested. From that time Clinton made the construction of the Erie Canal his great aim. He asked the legislature to investigate the matter, and in 1810 a commission of seven members was appointed to explore that "inland navigation." Clinton, of course, was one of the seven. Soon Robert Fulton and his friend Robert Livingston were added to the commission.

Difficulties and Delays.—The commission travelled over the whole line of the proposed canal—up the Mohawk River and past the beautiful lakes of western New York, to the shore of Lake Erie, near Buffalo. They found the ground so level that a canal could be built without much trouble.

The great hindrance to building the canal was the expense. Three hundred and fifty miles of canal would be needed, and that would cost several millions of dollars. The young United States, now so rich in money, was poor then, and even one million dollars seemed large to the people of New York. "This state cannot afford to pay for such a great piece of work," said the New York men; so De Witt Clinton took the stage-coach, went to Washington and asked President Madison for help from the nation.

"No, the United States is not able to dig the canal," said Madison. Clinton returned disappointed but not discouraged. "New York alone can do it and ought to do it," said he. The friends of the canal planned that New York State should sell bonds in Europe to the amount of five million dollars. They thought that the canal would make the state so rich that the bonds could

soon be redeemed. It was intended to start work without delay; but the War of 1812 began, and the canal had to wait.

The Canal Begun.—As soon as the war had ended, Clinton once more pushed the plan. Many persons still ridiculed the idea of a canal. The people who lived in the eastern part of the state thought that they would be paying taxes for the benefit of the settlers in the new western portion. The objectors were short-sighted; they had not yet understood that good for every one would come from an increase of trade by this new water path. "I will not vote for Clinton's big ditch!" exclaimed a member of the legislature.

But after all most of the people wanted the canal to Lake Erie. They elected Clinton governor of New York. The legislature voted that the canal should be begun at once. On the Fourth of July, 1817, three days after he became governor, Clinton and a number of friends went to the little town of Rome, where the line of the canal in its westward course left the Mohawk River. Here the work of digging the canal was to begin.

Rome was a famous place; Fort Stanwix had stood there during the Revolution, and over the fort, just forty years before to a day, had floated the first "Old Glory" flag that ever was raised above our soldiers. Now another famous event took place at this spot—into the ground Judge Richardson, the contractor, struck a spade and threw out the first earth of the great Erie Canal. The workmen and the men who lived in the village eagerly snatched the spade from hand to hand, each wishing to take his part of the honor, while

cannon roared and the people cheered. It was a wonderful day for the state and the nation.

The Canal Gains. Clinton Loses.—No piece of engineering work nearly so great as the Erie Canal had ever before been attempted in America. The central and western parts of New York were covered mostly with great forests and broad swamps. Through many a dark wood, where no white man except a hunter had

TRANSPORTATION BY CANAL BOAT

ever trod, the surveyors marked their levels and drove their stakes. Behind them came the laborers with the most powerful machines ever seen in the United States —machines which tore down big trees and later pulled up the stumps. Great plows drawn by oxen cut through the tangled roots below the ground, and big scrapers cleared the earth away.

Though the workers on the canal had no steam-shovels to dig for them and no railroad trains to carry

away the waste, their steady industry showed fine results. Out of the swamps came malaria mosquitoes which gave the laborers "chills and fever," but nothing stopped the progress of the work except the freezing weather of winter. At the end of about two years the canal was used by boats for fifteen miles east from Rome. In a year more it extended many miles to the west, reaching the Seneca River, and three years more, the engineers thought, would see it finished.

Before the end of the three years, however, Clinton was governor no longer. The canal work had proved very expensive, and his enemies had lost no chance to turn the people's hearts against him. He was charged with all sorts of evil intentions. Some slanderers said that he and his canal would bankrupt the state. Some even accused him of plotting to make New York a nation in itself, separate from the Union. After being governor for two terms, Clinton lost the next election.

III. CLINTON'S "DITCH" THEN AND NOW

Success at Last.—Not satisfied with getting Clinton out of the governor's chair, his enemies went a step farther, and removed him from the head of the canal commission, a post which he had held for fourteen years. Few persons knew so much about the canal and its prospects as did De Witt Clinton, but now another man was to direct the work.

Clinton's enemies, however, found that they had gone a little too far. The people of the state began to think seriously whether they had done right in defeating him. What though the Erie Canal was expensive?

It was a great piece of work, of course, and must cost a great deal of money. The real question was, "Is it worth what it will cost?" The people decided that the canal was well worth the price, and six months after Clinton had been put out as canal commissioner he was re-elected for a third term as governor.

With Clinton in office again, the canal work was pushed hard, for he wished to see the great task of his life finished while he was still governor. The wish came true. One day near the end of October, 1825, more than eight years after Judge Richardson had thrown out the first earth at Rome, a procession of canal boats, gayly decorated, left the harbor of Buffalo on Lake Erie and started out for the long trip across New York State to New York City. The Erie Canal was open.

The Victory Celebration.—On the first boat of the procession, the "Seneca Chief,"[1] rode Governor Clinton and Robert Livingston. They missed the presence of Robert Fulton; he had died ten years before. Among the boats which followed the "Seneca Chief" were the "Commodore Perry" and the "Noah's Ark." The "Ark" carried a strange cargo, supposed to be products of the West—two Indian boys, a bear, two eagles, a pair of fawns, and some fish from the Great Lakes.

Along the whole line of the Erie Canal and the Hudson River, cannon had been placed five miles apart. At each gun stood a man anxiously waiting. When, drawn by four fine gray horses, the "Seneca Chief" began to move, the cannon at Buffalo was fired. The next artil-

[1] The Senecas were one of the Iroquois tribes who lived in the western part of New York. A large lake there bears their name.

leryman, as soon as he heard the shot, touched off his gun; so did the next and the next on the long water-path from the Lakes to the sea. It took only an hour and a half to carry for all those hundreds of miles the glad news that "Clinton's Ditch" was done.[2]

For two weeks the procession of boats slowly pursued its way to New York. At almost every town and village the bells rang and cannon boomed. At Lockport the guns that were fired had been captured by Perry at the battle of Lake Erie. As the procession approached Rochester a boat called the "Young Lion of the West" came forth to meet it. On the bow of the "Young Lion" stood a sentinel. "Who comes there?" cried the sentinel to the "Seneca Chief." "Your brothers from the West, on the waters of the Great Lakes," was the answer. "By what means have these waters been turned so far from their natural course? again shouted the sentinel. The reply came back, "By the channel of the Grand Erie Canal."

By the time the boats reached Albany, poor Governor Clinton must have grown very weary answering all the speeches of welcome he was forced to hear along the way. But his weariness probably was as nothing compared to his delight at the completion of the great undertaking. From Albany the canal boats were towed down the Hudson by Livingston and Fulton's steamers. The Noah's Ark," unfortunately, had fallen behind the procession, so it was left in the canal.

The Marriage of the Waters.—The fleet of boats

[2] Beside the Erie Canal of 352 miles, 81 miles of canal have been made from the Hudson to Lake Champlain.

reached New York at daylight, and at nine o'clock, led by a United States war-vessel, proceeded to Sandy Hook, while the fort at the Battery and those in the harbor fired salutes. Sandy Hook is at the outlet of New York Bay, where the Atlantic Ocean may truly be said to begin. Although the month was November, the day was bright and the sea calm.

Two gilded kegs of water had been brought on the "Seneca Chief" all the way from Lake Erie. Governor Clinton raised one of the kegs and poured the contents into the ocean. This "marriage of the waters" betokened that the Erie Canal would play its part in the commerce of the world. Sea-captains had procured bottles of water from the most famous rivers of the earth—the Mississippi, the Columbia, the Orinoco, the La Plata, the Thames, the Seine, the Rhine, and various streams of Asia and Africa. All these likewise were poured into the Atlantic. The contents of the other keg of Erie water was distributed in bottles which were proudly carried home as souvenirs, and to Lafayette, who was then visiting the United States, was given one of the precious bottles.

Benefits of the Canal.—Governor Clinton's dream had come true, and he was a proud man to think of the service which the Erie Canal would render to his state and his country. Next year the people elected him governor for the fourth time, but he did not quite live to see the end of his term. Before his death, however, he did see great changes in the western part of New York State, which had been such a wilderness before the canal passed through it. Settlements were now spring-

ing up all along the line of the canal, the land was being cleared of the dark forests, and farming was flourishing.

Ten years after Clinton's death the Erie and Lake Champlain Canals had taken in enough money from tolls to pay for all they had cost and the running expenses beside; yet they had cut down the price of carrying freight to less than half what it was before the canals were opened. For twenty-five years the Erie Canal carried more freight than passed over any other road in the country. The chain of towns and cities which grew up along it helped to make New York the "Empire State," the foremost in our Union. Not only New York profited, but also the new state of Ohio, which found the canal the best and cheapest road for sending east her wheat and her wool.

Philadelphia could no longer boast of being the largest city of the United States. The products which the Erie Canal carried went mostly to New York City and made that seaport grow with wonderful speed. Steamships from across the ocean came into New York and went out from there, in preference to other cities. Just before the Great War, out of every eight dollars' worth of goods which we sent to other countries, three dollars' worth went from New York harbor. In many ways New York is the greatest city in the world, and the Erie Canal was one of the chief things which aided her growth in early days.

But as Philadelphia fell behind in importance when the Erie Canal was opened, so the canal itself in turn had later to yield first place to railroads. Along the Hudson and the Mohawk went the iron tracks—first

one, then two, then four,[3] and the speed and power of the railroad made the canal-boat drawn by its horses or mules seem very slow and feeble. Although the canal had been deepened since early days and all tolls had been taken away, people found that most kinds of goods could be sent more quickly and more cheaply by the freight-car. Every year saw fewer boats upon the canal.

LOCK ON THE ERIE CANAL

"It is a great pity to let the canal fall into disuse," at last said the New York legislature. "We will make it new and better, so that people will use it instead of the railroad for sending some kinds of heavy freight such as coal, lumber, stone, sand, grain. Instead of ten million dollars, which the old canal cost, we will spend thirteen times as much. We will build side canals which will nearly double the length of water-paths. We will double the width and the depth of the

[3] To-day there are six parallel railroad tracks which pass through the Mohawk Gap.

canal. Steam-driven barges ten times as large as the old ones can then navigate it, carrying a load equal to that of a long freight train, and traveling more than twice as fast as the old mule-drawn boat."

The new canal (finished 1918) took possession of the Mohawk River and by a series of dams turned it into a chain of lakes. In many place it buried the old canal out of sight under water. From the Mohawk westward the new ground dug in widening and deepening the old canal equalled half of that which was removed in making the canal at Panama. Yet one single state of Uncle's Sam's forty-eight did this great work. No wonder that the new Erie is often called "New York's own Panama." After all, however, the opening of this wonderful new Erie Canal cannot give us the thrill of joy which De Witt Clinton and his friends felt on the day of the "marriage of the waters" so long ago.

FOR DISCUSSION AND LIBRARY WORK

1. Of what use are the canals in Holland?
2. The first canal commissioners really were explorers of the West. Name some other exploring parties that have travelled from the East into the West.
3. From what six well-known colleges might have General Clinton chosen one for De Witt?
4. Explain how the lock of a canal works.
5. In what true democratic ways was the idea of the Erie Canal carried out?
6. What is meant by "redeeming" bonds?
7. Name several important cities that have grown up along the Erie Canal.
8. Do yo know of any other canals besides the Erie? If so, tell where they begin and end. Are they much used to-day?
9. What did the raising of the first Old Glory flag have to do with General Burgoyne and his surrender at Saratoga?

THE MEN OF THE FIRST RAILROADS

I. HOW AMERICAN RAILROADS BEGAN

The Railway Idea.—While, in De Witt Clinton's time, most persons in the United States thought that canals were just the thing for conveying freight and passengers, some were still unsatisfied. They said, "Can't we find some means of transportation even better than canals? The smaller the smooth surface on which a load glides along, the more easily it moves. Let us try railways on land."

Accordingly railways were built. The rails were of wood, the ties often of stone, and horses pulled the little cars. Two years after the *Clermont* made her first voyage, Thomas Leiper constructed such a railway to carry stone from his quarry along Crum Creek, near Philadelphia, to the boat-landing a mile away. It was thought a wonderful sight.

More wonderful yet to the people of our young nation was the three-mile railway at the Quincy quarry in Massachusetts. The granite for the famous Bunker Hill monument was hauled over this road. Soon after the Quincy railroad was finished, the Mauch Chunk "gravity" railroad in Pennsylvania, which is still in use, began to carry coal from Summit Hill to the Lehigh River, nine miles away.

Meanwhile Englishmen had been laying down railways or "tramways" from their many coal-mines, and had made a great discovery. Steam, they found, could

be used instead of horses to pull the cars. In these days that discovery seems very simple. If steam-propelled vessels, if a stationary steam-engine pumped water and raised coal out of mines, why could not steam make cars move? Simple as the idea now seems, the use of steam as a motive power on land was a wonderful discovery. It enabled man to travel both far and fast and to carry with him enormous loads.

STAGE-COACH FROM BALTIMORE TO WASHINGTON

The Baltimore and Ohio Company.—The first great push to the railroad movement in this country came, curiously enough, from the Erie Canal. When the canal was opened, Baltimore, as well as Philadelphia, began to fear losing the important Western trade. The merchants of Baltimore thought at first, "We will build a canal from our city up the Potomac River, toward the West," but they soon saw that such a canal would be exceedingly expensive, so they gave up the plan.

One day, Philip Thomas, a Quaker banker of Baltimore, received a letter from his brother in London. The letter told of a new railroad which was going to be built in England, and praised the scheme highly. Meeting his friend George Brown, Mr. Thomas mentioned the English railroad. The two business men agreed that an American railroad through the mountains to the West, over Washington's old trail, would be of great advantage to Baltimore.

That evening, twenty-five of the most important men of Baltimore, invited by the two friends, met in Brown's home. After thoroughly discussing the necessity of bringing from Ohio directly to Baltimore such products as wheat and wool, they decided to form the Baltimore and Ohio Railroad Company. Mr. Thomas was elected president and Mr. Brown treasurer. This was the first company in America to plan a railroad for general transportation, and it is still in business.

A Famous Fourth.—When the books of the new company were opened to receive subscriptions for stock, there was such a rush that the company could have sold four times as many shares as it had offered. Some of the money was spent immediately to pay engineers. The company determined to reach the West by the canal route which had been selected up the Potomac. Some of the engineers were sent to find the best path to the Potomac, others were dispatched to England to examine the railroads there. It was over a year, however, before the engineers finished their reports and their plans.

At last, in 1828, nearly three years after the Erie

Canal was finished, the company began work. On the Fourth of July, the birthday of great events in America, Baltimore had the biggest parade in its history. The paraders marched to a spot on the western edge of the town, where the cornerstone of the Baltimore and Ohio track was to be laid.

The honor of the day fell to white-haired Charles Carroll of Carrollton. The rich Mr. Carroll, now ninety years old, was the last of the signers of the Declaration of Independence. On that account he was the best known and most respected citizen of Baltimore. As he was also one of those who had formed the railway company, it was doubly fitting that he should be the center of attention.

After Charles Carroll had seen the stone properly placed and had smoothed off the mortar with his silver trowel, he turned to Mr. Thomas, the president, saying, "I consider this such an important act of my life that it is second only to the signing of the Declaration." He was right, for America could not have reached her present greatness were it not for her railroads.

Horses or Locomotives.—The railroad continued to be very popular. Every one seemed to wish to help. Some citizens gave to the railroad the land on which it was built; some gave the stone to make a foundation (ballast) for the track; another man contributed a piece of ground for a station at Ellicott's Mills, thirteen miles west of Baltimore. In return for such favors, the company put on the unfinished track a couple of rough horse-cars and let every one ride a short distance to get the new experience.

Three years after the Baltimore and Ohio Company had been formed, the railroad was ready for business. Morning, noon and night, on every week-day, a train or "brigade" of three cars, drawn by horses, made the trip to Ellicott's Mills and back. The first cars were entirely open; sun and rain beat down upon the passengers; but there was considerable travel. Still, the directors of the company saw that horses would never furnish speed and power enough to make the railroad a true success in covering long distances.

"I hear that George Stephenson of England builds good steam locomotives. Let us buy some," said one of the directors. "Yes, he does, but I hear also that his locomotives cannot get around curves such as we have on our road," answered another. The directors did not know what to do; but a helper appeared.

"Tom Thumb" Wins and Loses.—Peter Cooper, from New York, had bought a large piece of ground along the line of the railroad. Unless the road succeeded he would lose money. When he heard that the directors were perplexed, he wanted, for his own sake, to aid them. Mr. Cooper owned a foundry in Baltimore, and was as handy and clever as Eli Whitney. "I think I can make you a locomotive that will pull your cars and go around those curves," said he. In a carriage-maker's shop he built a locomotive that was better than Stephenson's machines, but it was so tiny that he called it "Tom Thumb." Actually it was only about twice as long as a trackman's hand-car of to-day.

One August day Mr. Cooper invited the directors to take a ride behind "Tom Thumb." With six men on

the engine and thirty-six more on a car attached, they went out to Ellicott's Mills, uphill, in about an hour and a quarter. Coming back they went at a speed that the passengers considered marvelous. "Why, in some places we go at the rate of eighteen miles an hour," cried they, "and the lightest stage-coaches do no more than thirteen." Several of the directors pulled out their note-books and wrote in them to show how smoothly they rushed along. "You cannot do that in a stage-coach," smiled they.

After Brown's "History of the First Locomotive." Courtesy of D. Appleton & Co.

THIS DRAWING SHOWS PETER COOPER'S "TOM THUMB" LOCOMOTIVE IN THE ACT OF PASSING A HORSE-DRAWN COACH ON PARALLEL TRACK. THE RACE TOOK PLACE ON THE BALTIMORE & OHIO RAILWAY FROM THE "RELAY HOUSE" TO BALTIMORE, AUG. 28, 1830

But pride had a fall. As they approached the Relay House, half-way to Baltimore, a light coach holding a dozen people and drawn by a fine gray horse stood waiting on a track laid parallel to that of the railroad for some distance. One of the stage-coach companies in Baltimore had sent out the horse to race with the new locomotive.

Off from the station went the two rivals, animal and machine. Soon the engine drew ahead of the horse. How those serious directors yelled then in glee! But

just as the driver was about to give up, something happened to the locomotive machinery. The train slackened speed, and the horse dashed past it. Then it was the turn of the coach passengers to shout. In spite of the accidental victory of the horse, however, it is really the locomotive that has won the race.

The Triumph of the Iron Horse.—Four years after "Tom Thumb" proved his value, the railroad owned three locomotives. Most of the freight and some of the passengers were still drawn by horses. The cars had been made to copy the old stage-coaches. They held six passengers inside, and several could find room on top. In bad weather the inside passengers had the best of it, for they could pull down leather curtains over the windows to shelter themselves.

By this time other railroads had sprung up all over the eastern part of the United States. The Americans soon set themselves to improve as well as to extend them. In the railroads, they saw, lay the future of the country. With each year the trains went faster and cars grew more comfortable. Each year saw the old railroads being lengthened and new companies being formed. The "railroad age" had begun.

As each new invention appears, some good old thing is laid aside. When railroads became numerous, canals began to lose their importance. Now few canals are left in our country, but many miles of new railroad track are laid every year.[1] We think that a person who lives far from the railroad is out of the world. The "iron

[1] Many railroad lines have occupied the level beds of abandoned canals.

horse" of to-day carries us to our journey's end so swiftly, so comfortably, and so safely that we think little of these great benefits. It is good for us to look back to the days when railroad travel was new, uncomfortable and dangerous, so that we may measure the wonderful change in travel that has come about in less than a century.

II. MATTHIAS BALDWIN AND THE RAILROADS IN PENNSYLVANIA

Peale and Baldwin.—The fame of Peter Cooper's "Tom Thumb" soon reached Philadelphia. Franklin Peale of that city owned and managed the Philadelphia Museum on Chestnut Street, where all sort of curiosities and up-to-date inventions were shown. "Nothing would attract people to the museum better than a tiny locomotive," thought Peale. But could any one in Philadelphia build such a little machine? Yes, there probably was one man—Matthias Baldwin.

MATTHIAS WILLIAM BALDWIN

Baldwin was a clever fellow of about thirty. He had been a very poor boy, but after learning the trade of watchmaker and jeweler he had gone into business for himself and had succeeded. Now he was turning out various kinds of machinery, among them the best stationary steam-engines which the United States had ever seen. "Baldwin, I want a good-sized working model of a locomotive. Will you make

it for me?" asked Mr. Peale. "I'm willing to try, but I have never seen a locomotive," answered the engine-builder.

"I Can Make It."—Fortunately a locomotive was closer at hand than Baltimore. The Camden and Amboy Railroad Company had begun to lay track from Bordentown, New Jersey, to Perth Amboy, near New York. An English locomotive had been brought over for the road, but was kept somewhat in secret until the road should be opened. Baldwin and Peale went to Bordentown and visited the shed where the imported locomotive was stored.

By the use of much persuasion, and perhaps a little money, the two friends obtained from the man in charge his permission to view the wonder. Baldwin inspected every part, secretly made a few measurements, then crept under the engine. Half an hour later he crawled out with a beaming face. "I can make it!" he cried. He did make the model. Pulling two cars that at a pinch would hold sixteen people, it ran on an endless track through the rooms of the museum. Crowds came to witness such a marvel.

"Old Ironsides" and Its Troubles.—Among the interested visitors to the Museum were the directors of the Philadelphia and Germantown Railroad, which was building its six-mile line. After a time they ordered a real locomotive from Baldwin. In six months of hard work he finished the engine. He called it "Old Ironsides."[2] When Baldwin first tried his engine on the road to Germantown, he found that he had made the pipes from

[2] For nearly twenty-five years almost every locomotive in the United States was named.

the boiler too small. He and his two helpers had to push "Old Ironsides" while it gathered speed. Then they jumped on and rode until it slowed down again. Thus, at the rate of a mile an hour, they reached Germantown. On the return trip, that cold November evening, as they stopped awhile to tinker with the engine, the pipe froze up. Baldwin and his men built a fire of fence-rails under the pipe and warmed themselves while it thawed.

In a few days Baldwin had put in a larger pipe and the engine was given a public trial. The newspapers praised the locomotive, but the directors did not feel satisfied. There were no brakes on either "Old Ironsides" or the cars, and the only way to stop the train was by reversing the engine. Often the reversing machinery would stick, and then the locomotive could run neither forward nor backward. As the sand-box had not then been invented, the wheels had a habit of slipping when the rails were wet. Altogether, the directors felt little confidence in their new purchase.

Had it not been for the good word of the engineers who laid out the railroad, the directors would have thrown "Old Ironsides" back on Baldwin's hands. As it was, they paid him five hundred dollars less than the four thousand on which they had agreed. They advertised that the locomotive would run from their station at Ninth and Green Streets only in fair weather. On rainy days the horses, which they had used for six months, again came into use.

Baldwin was disgusted with the complaints which rewarded his trouble. "That is my last locomotive,"

he declared, but men have been known to change their minds, and Matthias Baldwin changed his. For the rest of his life he did nothing but build locomotives. When he died, the Baldwin works had made fifteen hundred engines. Now it is the greatest locomotive plant in the world.

INTERIOR OF THE BALDWIN LOCOMOTIVE WORKS, PHILADELPHIA

The Governor's Trip.—Less than two years after "Old Ironsides" had made its first trip, Governor Wolf of Pennsylvania, with a number of distinguished friends, left Harrisburg one day to enjoy a new experience, that of going to Philadelphia by railroad. The party took the packet-boat on the canal which led along the

Susquehanna River to Columbia, where they spent the night. Next morning the travellers resumed their journey, and after a trip of eighty miles behind an actual steam locomotive they reached a hill overlooking the Schuylkill River at Belmont Mansion. Here the train stopped, two hundred feet above the level of the bridge across which the cars had to go.

An incline half a mile long sloped down to the western end of the bridge. It was thought that no locomotive could climb a hill of any size or safely descend one. The cars, therefore, were let down this "inclined plane" by an enormous rope. At the foot of the plane horses were attached to the cars and drew the passengers and freight four miles to the city station at Broad and Vine Streets. It had taken Governor Wolf and his party the whole day (eight and one-half hours) to reach Philadelphia from Columbia, but they were pleased with their trip.

A Happy-Go-Lucky Railroad.—This Philadelphia and Columbia Railroad was built by the state of Pennsylvania, as the Erie Canal had been constructed by the state of New York. Therefore, any citizen of the state was allowed to transport goods on the railroad, under certain conditions. Every farmer with a load of potatoes to take to Philadelphia could make a car, hitch his own team to it and proceed cheerfully along the track, providing the proper toll was paid.

As the railroad was double-tracked, this arrangement made little difference when horses only were used. As soon as locomotives were put into service, however, the slow nags of some farmers might hold back an entire

train-load of fuming and fretting passengers. There were no turn-outs where the locomotives could pass the wagons, so the operation of the road was very slow.

Though the state of Pennsylvania bought, owned and ran the locomotives, it did not own any cars. The cars belonged to several different companies. One company carried passengers only, another only freight, while a third company transported both goods and people. As travel was so often delayed by the farmers' wagons, there could be no time-table.

Moreover, there were no way-stations. Passengers, boxes and barrels were left along the road at the place most convenient. The buildings which seemed most like stations were the inns or hotels near the track. Always the train stopped to let the weary, dusty travellers refresh themselves. Usually the engineer and the conductor also left their train and went in to get a drink.

Of course, such a happy-go-lucky state of affairs could not be allowed to continue. Soon the Canal Commissioners, who supervised the railroad, decided that the locomotive should have the right to the track during nine daylight hours, and that the horses should use it the rest of the time. Not until nearly ten years after the opening of the road did the Canal Commissioners forbid horses to be used upon it.

At first the engineers of the locomotives had to stand out in the open, exposed to all the blistering sun, the freezing cold, and the pouring rain. When, pitying the men, the manager of the railroad offered to put cabs on the locomotives, the engineers refused. "The engines run off the track so often," said they, "that we

want to be free to jump." It was true that the trains often left the track, for the wedges which held the rails in place on their stone blocks were always coming out and allowing the track to spread. Fortunately, however, speed seldom exceeded ten miles an hour, so when the engine ran off into a ditch the engineer usually escaped unhurt.

MEETING OF THE UNION AND CENTRAL PACIFIC RAILROADS, SPANNING THE CONTINENT

For ten years the cars of the Philadelphia and Columbia Railroad continued to be drawn by horses from Belmont incline to Broad Street. At last William Norris, a young machine builder of Philadelphia, turned out a locomotive which for those times was big, powerful and heavy. He called it the "Washington." It was such a good engine that Norris said, "Let's try what she will do on the Belmont Plane." To his sur-

prise the "Washington" climbed straight up to the top. At first no one believed the story, but after awhile it became useless to deny what William Norris could prove every day.

Now began the real development of the railroad in Pennsylvania and in the entire Union. People were no longer afraid to build tracks across the mountains. In 1854, twenty years after the Governor of Pennsylvania made his first railroad trip, the iron track ran from Philadelphia across the Appalachians to Pittsburgh.

The railroad train was so much swifter than the canal-boat that the old canals along the Susquehanna and the Juniata went out of use. The inclined planes by means of which cars and boats were lifted over the Pennsylvania mountains fell into decay. The state of Pennsylvania sold its rights in the railways and canals to the Pennsylvania Railroad Company, whose officers proved so capable and intelligent that it finally became the greatest railroad company in the world.

In the previous chapter we have read many things about the development of the modern railroad in America. From wood as fuel we soon advanced to the use of coal to produce steam. Now the Pennsylvania Railroad has even done away with some of its steam locomotives and uses silent electric power to pull local trains. Still the power of the railroad comes from coal, but in many parts of our country coal has been replaced by oil, or by electricity which is made by the force of great water-falls. These changes in the motive power of locomotives are but a few of the improvements in railroads during this twentieth century. As railroads

have improved, we have depended more and more upon them, until we now call them the arteries of our commercial life. When Charles Carroll laid the cornerstone of the first steam railroad in the United States, he laid the foundation of our modern America.

FOR DISCUSSION AND LIBRARY WORK

1. What is meant by a "gravity" railroad?
2. What power for railroad cars, besides that of animal and locomotives, was tried in early days on the B. and O. Railroad?
3. What made the first train-ride on the railroad from Albany to Schenectady so curious and laughable?
4. What happened to Washington on "his old trail" to the West?
5. How many kinds of "engineers" are needed in railroading?
6. Which of the leaders described in this book died without seeing a railroad train?
7. What disused canal have you ever seen?
8. What can you find out about Matthias Baldwin's boyhood?
9. Tell the story of the first transcontinental railroad.
10. What ages beside the "railroad age" have you read of in the world's history?
11. What additional improvements in railroading can you mention?
12. Why did the United States Government take charge of all our railroads in 1917?

CYRUS HALL McCORMICK
1809–1884

THE MAN WHO MADE AMERICA THE GRANARY OF THE WORLD

"I expect to die in the harness, because this is not the world for rest."—*Conversation with a Virginia friend.*

I. THE VIRGINIA REAPER

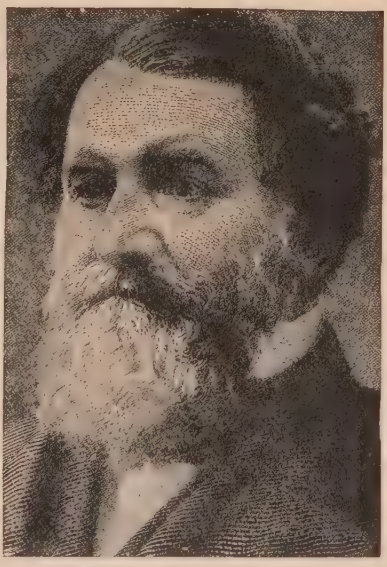
Cyrus and His Farmer-Doctor.—It was summer-time in Virginia. With hot weather came the dreadful yellow fever, and even the farm-houses in the higher country west of the Blue Ridge lost many of their people. At Walnut Grove farm Robert McCormick's little boy Cyrus, five years old, lay very ill.

An old-fashioned doctor came to Cyrus's bedside. "I will bleed the lad," said he. "Oh, no, you won't, doctor," said Robert McCormick. "You have bled other people, and they died. I'll have no more bleedings."

"But every doctor bleeds people for the fever," answered the astonished physician. "Well, then, I'll be the doctor," replied Mr. McCormick. Hot baths and hot herb-teas were the medicines the sensible farmer used, and soon Cyrus was a well boy again. Had this little fellow died, that year at the close of the War of 1812, the world would have missed one of its great inventors.

Cyrus Wishes for a Reaper.—Though Robert McCormick owned several farms, as well as gristmills and

sawmills, and so was a rich man for that part of the country, Cyrus as he grew up received no special school advantages. He went to a log school-house, sat on a rough wooden bench in the gloomy room, and was taught by the same "master" who showed the youngest children how to make their letters. Cyrus owned only five school-books—an arithmetic, a grammar, a spelling-book, a catechism and a Bible; but he studied these as though his life depended on his learning.



From Iles: Leading American Inventors, Henry Holt & Co.

CYRUS HALL McCORMICK

On his father's land there was plenty of work to do; and Cyrus did his full share. He swung a scythe in the hay-field and cut the wheat with a cradle.[1]

Though Cyrus was a strong, tall fellow, he found that the handling of the heavy cradle under the burning sun was no joke. Often as he slashed down the yellow grain Cyrus wished for a reaping-machine which would do the task in an easier way.

[1] A grain-cradle is a scythe with a wooden framework attached to it so that the cut grain can be laid out straight as it falls.

The idea of such a machine was not new in the McCormick family. Ever since Cyrus was seven, he had known that his father wanted to invent a reaper. For fifteen years Robert McCormick planned and tinkered in his blacksmith shop to make a machine that when pulled by horses would work faster than any set of farm-hands.

The Son Builds on the Father's Work.—While Robert McCormick worked on his reaper, and failed, and worked again, Cyrus became a young man, tall and big and straight. The neighbors admired Cyrus, as on Sundays, in his broadcloth coat and tall beaver hat, he led the church singing. Like his father, Cyrus was of a mechanical turn of mind, and loved to work on making things. Sometimes he helped Mr. McCormick with the reaping-machine; but although Cyrus had good ideas about machinery, it does not appear that his father ever asked Cyrus for advice.

When Cyrus was twenty-two, Robert McCormick brought out in triumph his reaper. "The neighbors have laughed at me for fifteen years," said he, "but now I will show them!" Into a field of grain he drove the machine. Oh, yes, it cut the wheat very well; but it left tangled stalks behind it. "Your reaper is no good," said those who watched. "No one can ever straighten out that mess." Robert McCormick took a long look at the tangled grain. Then he drove the reaper back to his barn. He was through with inventing.

Cyrus, however, had his own notion as to the best way to make the reaper successful. Since his father

had given up, the road lay clear for him to try his luck. He began to alter the design of Mr. McCormick's reaper in a number of ways. For several weeks he labored hard to complete his machine before the harvest should be over. Very nearly too late was he, but one day in July Cyrus brought out his reaper and tried it on a field of wheat which his father had left standing for his benefit.

As the horse pulled the reaper forward, a wooden reel revolved and swept the stalks down toward a cutting-blade which shot back and forth. The keen V-shaped teeth of the blade sheared off the grain; it fell evenly upon a platform from which it was raked off by John Cash, who helped Cyrus. Here at last was the successful reaper so desired by many a weary man. It was a proud day for Cyrus. He had carried out his father's great idea.

The Lexington Victory.—A few days after the reaper had proved its value, Cyrus gave a public exhibition on a neighboring farm. He had made a few changes for the better in the machine, and it worked well. With two horses to pull the reaper, he cut six acres of oats in one afternoon; that is, his invention did the work of a half-dozen men. The beholders could scarcely believe their eyes.

The next summer Cyrus took his machine to Lexington, the largest town within reach. Several hundred people were present to watch the curious affair. As the reaper came along the road a negro held tightly to the bridle of each horse which drew it, for the poor beasts were almost scared to death by its terrible rattling.

One of the women who, hearing the noise, looked out of the window, said, "I thought it was a right smart curious sort of a thing, but it wouldn't come to much." And at first that was just what the crowd at Lexington thought.

The field Cyrus tried to reap was hilly, and the machine bounced about so much that more grain shook out of the heads of wheat than stayed in. "This won't do," said the farmer who owned the wheat. "Stop your horses!" The crowd laughed, but William Taylor, more intelligent, came to the help of Cyrus. "I'll give you a fair chance, young man," he remarked. "That field of wheat on the other side of the fence belongs to me. Pull down the bars and cross over."

Glad of the friendly offer, Cyrus accepted it. The second field was much more level, and before sundown he was able to cut the same amount of grain as he had done the previous year. As the last of the six acres fell, the crowd cheered heartily. Then the reaper was driven into Lexington and placed on show in the court-house square. A noted teacher of the town studied it long and carefully, and finally called out, "This machine is worth a hundred thousand dollars." That sum seemed immense to the hearers, but it was small compared with the riches which the reaper finally brought to Cyrus, and, more than that, to his whole country. When the big young fellow came back home he felt that he had won a great victory. Best of all was the praise from his father, "It makes me feel proud to have a son do what I could not do."

Cyrus Refuses to Give Up.—Cyrus now set to work

to make the reaper perfect. "His whole soul is wrapped up in his reaper," the neighbors smiled. Once the thought came to him, "There is so much grain to cut in this big country of ours that I may—perhaps—make a million dollars from my invention." But though the idea crossed his mind, it seemed as impossible as reaching the moon.

In the *Lexington Union* newspaper Cyrus advertised his reapers for sale at fifty dollars apiece; but no one offered to buy. Even those who had seen the machine do its work did not care enough about it to invest. "Give up the idea of making your fortune by the reaper," said Cyrus's family. "Here is a farm for you," said his father. "Make a living on that."

Cyrus took the farm, lived there in a little log house with a couple of old negro servants, and cultivated the land. He did not give up his dearly loved reaper, however, but secured a patent on it. For a year he worked the farm; then, as little money came in, he tried another business. America was beginning to use iron in considerable amounts, so Cyrus persuaded his father to become partner with him in an iron-furnace. For awhile the iron trade went on well; then came hard times, and the McCormick partners failed. Cyrus gave up his farm to pay their debts. He was eight years older than when he began to make reapers, he had lost all his property, and he had not sold a single machine.

Not discouraged, Cyrus again gave a demonstration of the reaper. This time it was near the town of Staunton, where, later, President Woodrow Wilson was born. Again the people applauded, but did not buy. The next

spring, though, a man who had seen the reaper at Staunton actually came and bought one. Soon a second farmer was bold enough to invest his money in a reaper. Business had begun.

The next year Cyrus McCormick sold not a single machine, but the year following (1842), by much talking and traveling, he disposed of seven. Two years later fifty orders came in, and instead of farming he had to spend all his time in his reaper shop. Soon people began to pay for the right to sell the machine in various parts of Virginia. Several farmers in what was then the West, near the Mississippi River, wrote for "Virginia Reapers." McCormick's invention had found its place in the agriculture of the country.

II. THE WHEAT EMPIRE OF THE WEST

The Virginia Reapers for the Prairies.—When the machines for the Western farmers were made, the problem was to get them to the buyers. The seven reapers were loaded on wagons (1844) and were taken to Scottsville, not far from Thomas Jefferson's Monticello home. From Scottsville they went by canal to Richmond, then by vessel down the James River and around Florida to New Orleans. Thence on a river steamer the "Virginia Reapers" traveled up the Mississippi and the Ohio to Cincinnati. From that city, various long roads still had to be traversed before the machines reached the farmers whom they were to serve. Four of the seven farmers who bought those reapers did not get them in time for the harvest of that year, so two of the disappointed men would not pay McCormick at all.

As long as no railroads crossed the mountains it clearly would not be of much benefit to make reapers in Virginia for sale to the West. One of McCormick's friends said to him, "Cyrus, why don't you go West to manufacture your reaper, where the land is level, labor is scarce, and you will be close to the farmers who in future will be your best buyers?"

Cyrus thought well of his friend's advice, but determined to look about for himself before taking any action. He put into his money-belt three hundred dollars, and set out to view the best wheat lands of the United States. Up through Pennsylvania he rode to western New York, then continued his stage-coach journey back along Lake Erie to Ohio, Indiana, Illinois, and Michigan. Still on he went to Iowa and Missouri. As he traveled, he plainly saw that on those wide flat prairies of the Middle West the reaper would be far more useful than on the more hilly country of the East. The many immense grain-fields of the pioneers seemed to cry aloud for the coming of such help.

Growing Up With Chicago.—"The West will buy thousands upon thousands of my reapers," thought McCormick. "I must build a factory somewhere out here." Where could the inventor put a factory to the best advantage? It must be near the center of the prairies and also on the water. McCormick spread out a big map of the United States. Many times he looked it over, but at last he placed his finger on a small new town which people called Chicago. This was to be the scene of his great business venture.

Chicago in 1910 had more inhabitants than any

other American city except New York; but in 1844 it was a forlorn little place. There were no numbers on the frame houses where lived its ten thousand people; the streets were unpaved and deep in mud; it had no railroad, no telegraph, no gas, no sewers. Around the town lay miles of swamp. In the year when McCormick first saw it, only six small vessels had come into its shallow harbor. The people of Cleveland and St. Louis despised Chicago and called it a mud-hole.

Yet young McCormick had faith in the future of the shabby town. He was sure that the grain of the West would make Chicago grow into a great city. His reaper would make it possible to raise a hundred times as much grain as the West had ever known, and this grain would be sent East by water and land. Both ships and railroads would come in time to the almost unknown settlement on the shore of the lake.

It was with empty hands that McCormick came to the West. He had not the needed money to establish business in a large way, and he needed a backer. Of the men in Chicago he went to the most successful, William Ogden; when McCormick proposed building a reaper factory, Ogden saw its value. "You are the man we want here," said Ogden. "I'll give you twenty-five thousand dollars for a half-interest, and we'll build the factory at once." McCormick agreed, and the new firm erected (1847) the largest plant in Chicago.

The Reaper Fights for the North.—By 1860, just before the Civil War, McCormick's factory had grown to be the pride of Chicago. It actually employed one hundred and twenty men. Should we consider it a great

factory now? The reaper that was made in the factory, however, looked very much like McCormick's original machines. Two seats had been added to it—one for the driver and one for the man who had to rake the cut grain off the platform upon which it fell, but those were the only great improvements. Now came in a device which did the work of the man who raked off the grain.

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STEAM HARVESTER AT WORK

Only two men then were needed to work with the machine—the driver and the man who followed behind and bound the bundles of cut grain into sheaves.

When the Civil War began, the nation learned the true value of the reaper. It has often been said that the war was a conflict between the cotton states and the wheat states. It was a Northern man, Eli Whitney, whose cotton-gin made slavery profitable for the South; it was a Southern man, Cyrus McCormick, whose reaper

made the Northern grain states rich and strong. While Northern men fought in the Union armies, the reapers, often driven by women, did the work at harvest for which these men with their "cradles" would once have been needed. The reaper, drawn by its two horses and doing the work of ten men or more, harvested plenty of grain to feed those who fought and those who stayed at home. Said Edwin Stanton, President Lincoln's Secretary of War, "Without McCormick's invention I fear the North could not win."

The Great Fire. McCormick Stands by Chicago.—In a few years after the war McCormick's factory was making ten thousand "harvesters" a year. The great wheat states of Kansas and Nebraska had come into the Union since the war began, and an additional army of settlers in the land which is now North Dakota and South Dakota was now raising wheat. McCormick had become a very rich man. He no longer needed to be frequently at his factory, for his brothers carried out his ideas to the letter, thus freeing him for wider service. Away off in New York the big, bearded inventor now made his home and enjoyed his happy family life.[2]

One night in 1871 the sky in Chicago grew red with the glare of flames. Before that terrible and famous fire was checked, most of the business portion of the city lay in ashes. McCormick happened to be in Chicago at the time. He lent a hand, an able and strong hand, to fight the fire; but his factory was one of the many buildings which burned to the ground.

[2] McCormick's New York home was at the corner of Tenth Street and Fifth Avenue.

Cyrus McCormick sent to his wife in New York a telegram, "Come at once." Strong as he was in body and mind, he leaned on her advice. Two days later he met her at the station. With his partly-burned hat and his scorched overcoat he looked as though he had been through hard times; but Mrs. McCormick was so glad to see him that she did not consider his clothes.

"Now, Nettie, what do you want me to do?" he asked. "Shall I rebuild the factory, or shall I retire from business and live on my investments?" Mrs. McCormick thought of their son, who, she hoped, would have the honor to carry on his father's business. "Rebuild!" she answered.

At once McCormick leaped to the task. "Buy lumber," he commanded one man. "Telegraph my agents to forward all the money they can get," he ordered another. Before the smoke had ceased to rise from the burned city, another factory, bigger than the former one, was being built. A despatch went to New York, "Sell my house; from this time on, I am going to live in Chicago." Many business men who had intended to leave the city changed their minds on seeing McCormick's confidence. They built Chicago up again larger and finer than before, and the master of the reaper saw wealth come rolling into his beloved city.

After a time McCormick added to his harvester a binding device which tied the sheaves with twine in as good a way as could be done by any man. Now the "reaper and binder" was complete. All it needed was a driver. It grew so popular that the people of Europe used it also. This wonderful machine, doing the work

of twenty laborers at once, made grain so cheap that no nation with good land and a favorable climate need suffer for lack of bread.

Now the United States is the greatest wheat-raising country in the world. On the western prairies of North Dakota, South Dakota, Minnesota, Kansas and Nebraska wheat is king. To reap those oceans of golden grain, the reaper had to grow larger and larger. Nor was its work complete with the mere reaping and binding. In its largest form the reaper cuts the grain, threshes it, puts the wheat into bags at the rate of two a minute, and leaves the bags in neat rows along its path. Instead of two horses, six, ten, sixteen, twenty are needed to pull the great Western machines. The most gigantic reaping-machines require thirty-two horses to haul them along. Sometimes a gasoline tractor does the work of all these horses. Cyrus McCormick himself would be amazed at the development of his ideas.

At last, when seventy-five years had passed over his head, McCormick's life came to an end. As he lay dying, his eyes opened, and he murmured his last words, "Work, work!" His work, indeed, had been a blessing to mankind. He had seen his country grow from a feeble nation to a strong one, and he knew that he had helped to make it strong. The reaper had done much to settle the West, to make its farmers rich, and to feed the crowded cities of our land. To multiply the farmer's strength by ten was the wonder achievement of Cyrus McCormick. Through this achievement America stands as a storehouse of plenty for the world.

FOR DISCUSSION AND LIBRARY WORK

1. Draw a sickle, a scythe, a "cradle," a flail. Do farmers use these today? If farmers were forced to use such tools to harvest their crops at present, what would be the result?
2. Was Robert McCormick a father to be proud of? Explain your answer.
3. Are people to-day quicker to take up a new invention than when McCormick was a young man? What are the reasons for your opinion?
4. What other inventors have had to wait a long time for success?
5. Why should McCormick's Western factory be on the water?
6. What was the earlier name of the settlement of Chicago?
7. What factories do you know that employ more men than McCormick did in 1860?
8. What part in giving bread to the Allies did America play during the Great War?

SAMUEL FINLEY BREESE MORSE
1791–1872

THE MAN WHO SENT WORDS BY WIRE

"Nothing but the consciousness that I have an invention which is to contribute to the happiness of millions would have sustained me through so many trials of patience in perfecting it."—*Letter to a friend in Congress.*

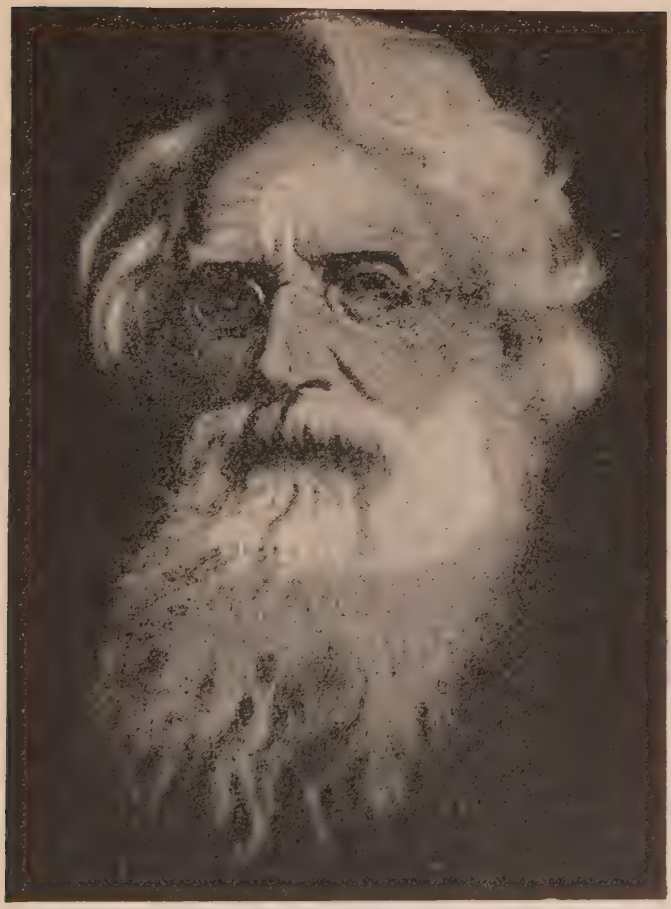
I. ARTIST AND INVENTOR

In the days when Washington was President, old Madam Rand of Charlestown, opposite Boston, kept a little school. "What are you drawing on your slate, Samuel Morse?" said she one morning to a blue-eyed youngster four years of age. Samuel got a good rap from her rattan, for his drawing was a funny picture of the old lady.

Years later, Samuel's father, a minister who was far from rich, managed to send his son to Yale College; then the sixteen-year-old boy found this gift for drawing a valuable accomplishment. To pay part of his expenses he painted miniatures for five dollars apiece and drew profiles for a dollar.[1] Samuel longed to be a true artist. Just before his graduation he painted "The Landing of the Pilgrims at Plymouth" so well that Mr. Morse consented to Samuel's desire to study art.

A Lesson From a Master Painter.—Samuel now began

[1] Miniatures were little portraits which could be worn in lockets. They were usually painted upon ivory. Profiles were side-face portraits.



SAMUEL FINLEY BREESE MORSE
From a painting by himself, using a mirror. This portrait is exhibited at the museum of the Brooklyn Institute of Arts and Sciences

to study painting with Washington Allston, one of the leading artists of the time. In the spring after Samuel graduated from college, Mr. Allston sailed for Eng-

land and took his pupil with him. In England Morse met Benjamin West, the most famous American artist of that day, and Samuel gained much from this fine old artist's good advice.

One day Morse showed to West a drawing which he had just made. "Very well, sir," said West. "Go on and finish it." "It is finished," answered the young man. "Oh, no," replied West. "Look here, and here, and here." Morse saw his faults and spent a week in going over the drawing. Then he brought it once more to West.

"Very good," remarked West again, "but go back and finish it." "Isn't it finished yet?" asked Morse, disappointed. "Not yet," said the famous artist. "Here are several places which need attention." In three or four days Morse again brought back the drawing. "Very clever," granted West, "but go back and finish it." "I cannot finish it any more," cried Morse in despair. "Well," West answered, "I have tried you long enough. You have learned more by this one drawing than by half a dozen careless attempts. Truly finish one picture, and you will be a good painter."

Married but Homeless.—Morse took West's lesson to heart and worked accordingly. Soon one of his pictures was declared to be among the best of those produced that year in England. After four years of careful study, Morse thought he was qualified to be an artist in his native land. He sailed back to Boston and opened a studio, but the Americans were not used to buying paintings of any kind except portraits.

As there were already several good portrait-

painters in Boston, Morse had few orders, so he took his canvas and brushes and set off on a tour through the towns of New England. He found many customers for portraits and felt much encouraged. In Concord, New Hampshire, at an evening company, the tall, pleasant young artist, then twenty-five, met a charming girl of sixteen years, Lucretia Walker, and on the part of both it was love at first sight. Soon they became engaged, but not until two years had passed did Morse feel sure that he could support a wife by his brush.

Even after the young people were married, Morse had to continue his travels about the country in search of customers. It would have been impossible for Lucretia Morse to accompany her husband on these rough stage-coach trips, so she remained with Samuel's father and mother at New Haven, Connecticut, where the old people had now made their home.

The life of Morse as an artist was full of ups and downs. Sometimes he prospered; sometimes he could find no sale for his pictures. Finally Morse decided that New York City was the place for him to live. The Erie Canal was nearly finished (1823), and Morse believed that it would make New York the greatest and richest city of our land. Of the wealth which Morse thought would come pouring into the city he hoped to get a share.

A Sad Loss. Back to Europe.—To New York Morse therefore hastened. He secured good board at $2.25 a week, and found a fine studio on Broadway opposite Trinity Churchyard; but he waited a long time for the expected dollars. At last the city of New York sent

him to Washington to paint the picture of Lafayette, who was then making his third visit to the United States. While Morse was working on the portrait, he received sad news from New Haven. His wife, so dear to him, had suddenly died.

This was a staggering blow. For five years Lucretia had cheered him when the future seemed dark and had rejoiced at each of his successes. He could not even reach New Haven in time for her funeral. His three little motherless children had to be sent to the homes of relatives. Morse and his wife had never been able to have a real home; but now he was forlorn and lonely indeed.

Returning to New York, after a time, Morse again fell to work. Strangely enough, he now secured as many orders as he could fill; but soon he felt that his painting was not improving, and that he ought to travel once more to Europe and study the wonderful pictures of some of the old masters. Accordingly, in 1829, at the age of thirty-eight, Morse sailed from New York in the packet *Napoleon,* and landed at Liverpool after a voyage of nearly four weeks.

The Birth of a Great Idea.—Three years spent in the art-galleries and studios of Italy gave Morse the additional taste and skill which he wanted. He set out on his return to America. One day the passengers at the cabin table of the ship began talking of electricity. Many things had been discovered about that strange force since Franklin's day, but its great power had not yet been used.

"How long," asked one gentleman, "does it take

for electricity to pass along a wire?" "It passes so quickly that we cannot measure the short space of time," answered another. At that instant a wonderful thought took possession of Morse. "I see no reason, then," said he, "why we should not send, in the twinkling of an eye, electric messages."

Though this was to Morse an entirely new idea, it was not new in the world. Inventors in England, France, Germany and America already had been trying experiments along this line; but Morse, fortunately, knew nothing of such trials. As, at the end of a month's voyage, his ship neared Sandy Hook, he said to her commander, "Well, Captain, if you hear some day of the electric telegraph as the wonder of the world, remember that the thought was born on your good ship."

But invention took money. Morse had spent all his cash, and found it hard even to make a living. In the three years of his absence from America other artists had taken his place. Though Morse had many friends, customers were few. Some young men came to take lessons in art, but even with painting and teaching combined Morse's income was pitifully small. At one time his meals consisted principally of tea and crackers. One room high up in a New York building [2] served as a living-room and a studio.

On one occasion Morse remarked to a pupil who had not paid his fee, "Well, Strother, my boy, how are you off for money?"

"Why, professor," answered the young fellow, "I

[2] This was at the northeast corner of Beekman and Nassau Streets. The office-building which now stands there is called by Morse's name.

am sorry to say I have been disappointed in getting it, but I expect some next week."

"Next week!" echoed Morse in a sad tone. "I shall be dead by that time."

"Dead, sir?"

"Yes, dead by starvation."

"Would ten dollars be of any service?"

"It would save my life."

The two dined together. After they had eaten, Morse observed, "This is my first meal for twenty-four hours. Strother, don't be an artist; it means beggary. A house-dog lives better."

There is no doubt, however, that in time Morse would have gained a fine income. He had given his whole life thus far to the study of art, and he was recognized as a good painter. Nevertheless, in the bottom of his heart Morse loved invention more than art.[3] Few men over forty are willing to begin again their lives and to give up the line of their previous training. For the sake of his great idea Morse was ready to make the sacrifice.

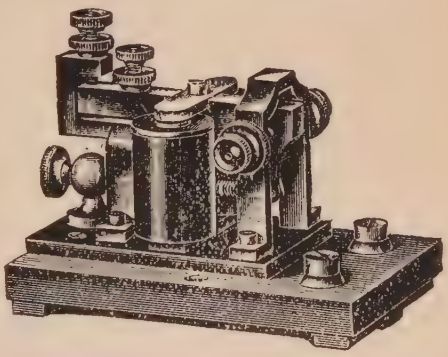
II. THE STAR OF VICTORY

Help Comes.—If Morse had been willing to beg help from his friends, he need not have suffered hunger; but he was too proud to ask assistance or run into debt, and he was not yet ready to borrow money as a business venture. At last help came without his request. He

[3] Morse had already made several inventions, one of which received high praise from Eli Whitney.

was appointed a professor of art in the New York City University which had just been built on Washington Square. To the University Morse now moved from his bare room, and there during his spare time he worked on his invention.

One of the students at the University was Alfred Vail, son of Judge Vail, who owned the Speedwell Iron Works at Morristown, New Jersey. Young Vail was a good mechanic. He learned of Professor Morse's invention, came to see it, and saw that if successful the telegraph would be a wonderful thing. To help Morse succeed became Vail's ambition. "I will sink or swim with Morse's telegraph," said he. Soon he persuaded his rich father to advance two thousand dollars with which to build a good machine and to pay for patents on it. In return Morse gave Alfred Vail a quarter interest in the invention.



A MORSE KEY USED FOR TELEGRAPHING

The Partners Convince the Judge.—By pressing a key, so making or breaking an electric current, Morse's machine caused dots and dashes to be marked upon a paper tape miles away. The rough idea of the telegraph was clearly shown in Morse's cheaply made piece of apparatus, but Vail was able to improve the apparatus in many ways. The model made by Morse, for

instance, marked the dots and dashes in a zigzag manner; Vail easily made them form a straight line.

The partners set up their chief workshop in Judge Vail's iron-works at Morristown, and all through the fall of 1837 they labored there. It was a trying time. Often their experiments failed, and often they felt discouraged; but they never gave up. The Judge, however, who saw his two thousand dollars rapidly being spent, began to doubt that his son and the professor would ever succeed.

One January morning in 1838 the Judge received an invitation, "Come and see the telegraph work." He hastened from his home to the workshop. Morse explained the apparatus, then went off to a distant room where he was to receive the telegraphic message through three miles of wire which he had tacked up around the Speedwell plant. As soon as Morse had disappeared, the shrewd old Judge took from his pocket a slip of paper on which he had written, "A patient waiter is no loser." "If you can send this and Mr. Morse can read it at the other end, I shall be convinced," said he.

Alfred Vail sat down at the key. Slowly he ticked off the message, which took about a minute. Soon Morse hurried in with an exact copy of it. The Judge was carried away with delight, and wanted to go at once to Washington in order to persuade Congress to put up a government telegraph line. Morse and Vail had to argue strongly before he would give up his intention; but the partners felt that their machine was not yet satisfactory enough to show to the world.

The Heart-Sick Inventor.—In a few weeks more, Morse and Vail were ready to exhibit their telegraph. At the Franklin Institute, Philadelphia, on Seventh Street below Market, the instrument was shown. It greatly pleased every one who saw it. From Philadelphia the partners took the invention to Washington. A room in the Capitol building was set aside for the use of Morse; he strung ten miles of wire back and forth and flashed through this his electric words. President Van Buren with his highest officers visited the room and saw the telegraph at work; there were many other distinguished visitors; but Congress refused to set aside any money to build a telegraph line.

One of the leading Congressmen, however, saw the value of Morse's idea. He persuaded Morse to go abroad and get some foreign nation to take it up. The inventor took the steamship, which had now replaced the sailing-vessel as a means of travel to Europe, went to England and France, stayed a year, but accomplished nothing. The story was ever the same—great praise from men of knowledge, but no help from the government. Without such help the telegraph could not yet be built to various parts of the country. People were not yet sufficiently interested to subscribe to a private company the large amount of money needed.

"I return without a farthing in my pocket, and have to borrow even for my meals," wrote Morse. Vail and other men who had helped push the telegraph had lost money in business and could not furnish any more at that time. Morse went back to painting in order to support himself, and also took some of the first photo-

graphs ever made in this country. By denying himself all pleasure, and even by cutting down his food, he tried to save money to give Congress another exhibition of the telegraph. "I am crushed for want of means," said he.

A Great Disappointment.—From his brother Morse borrowed money enough to pay his expenses for a trip to Washington, and again he asked Congress to try his invention. Ten years had passed since on board ship he had first seriously thought of the telegraph, but he was still begging for help. Day after day and week after week went by, yet Congress had not even discussed the question. Finally the Representatives took it up and by a very close vote (89 to 83) decided that thirty thousand dollars should be spent in testing Morse's telegraph. Then it was necessary for the Senators to vote upon the proposition. Only a week of the term of Congress was left. If other business prevented the discussion of the invention, nothing would be done for at least another year. Morse was at the end of his money, and felt almost completely discouraged.

For six days of the last week of Congress Morse sat in the gallery of the Senate Chamber, listening impatiently to speeches about everything but the telegraph. Every night he returned to his room with sad heart, for another precious day had passed in vain. The last day arrived. Congress was to sit until midnight. Until evening Morse stayed at the Capitol, waiting, waiting. "Nothing will be done about your telegraph," then said his friends. In deep disappointment Morse left the building and went to his boarding house.

Though his hopes were crushed to the ground, he said a prayer, and with trust in God for the future, slept as quietly as a child.

The Dawn of a Brighter Day.—In the morning, prepared to leave Washington that day, he came down to breakfast. A servant approached his chair, saying, "A young lady is in the parlor and wishes to see you." It was Annie Ellsworth, daughter of a good friend to Morse; her face wore a smile as the inventor came into the room. "You are an early caller, Annie," observed Morse. "Yes, I have come to congratulate you," answered the girl.

"Indeed, on what?"

"On the passing of your bill by Congress."

"Oh, no, you are mistaken; I was in the Senate chamber till after the lamps were lighted, and my friends assured me there was no chance for me."

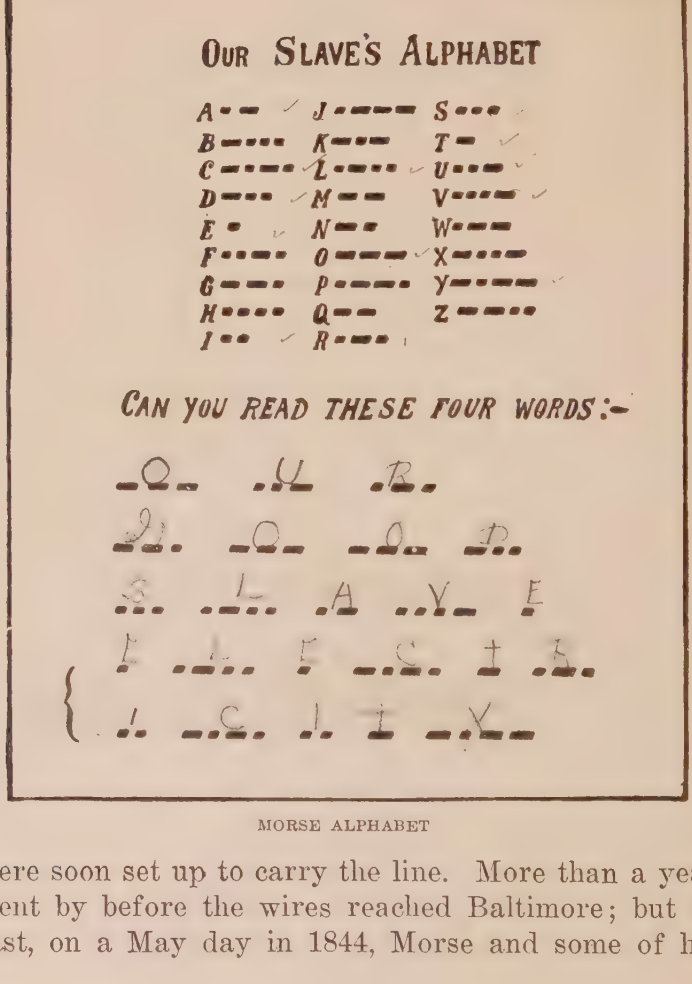
"But it is you who are mistaken," replied Annie Ellsworth. "Father was there at midnight and saw the President put his name to your bill. Am I the first to tell you?"

For awhile Morse could not speak. At length he answered, "Yes, Annie, you are the first. Now I am going to make you a promise. The first message from Washington to Baltimore shall be yours."

"Well," said Miss Ellsworth, "I shall hold you to your promise."

Annie Ellsworth's Message.—Upon hearing of the passage of the telegraph bill by Congress, Alfred Vail came from Philadelphia to Washington to help his

partner. At first Morse and Vail put their telegraph wires underground, but this did not work well, so poles



MORSE ALPHABET

were soon set up to carry the line. More than a year went by before the wires reached Baltimore; but at last, on a May day in 1844, Morse and some of his

friends assembled at the Capitol to see the telegraph carry out the conditions which Congress had fixed.

Annie Ellsworth was the queen of the hour, for Morse had not forgotten his promise. After consulting with her mother, Annie had chosen, as the message she wished to send, a text from the Bible, "What hath God wrought?"

Morse's fingers made the proper dots and dashes. In Baltimore, forty miles away, Vail at the other end of the line received the message and flashed it back again to Morse. The dream of the artist, which once seemed so wild, was now realized by the inventor. Though Morse, now fifty-three years old, had grown gray with care, this was his day of triumph.

Yet the great steadfast inventor, as his friends crowded around to congratulate him, took little of the praise to himself. "That sentence of Annie Ellsworth's," he wrote to his brother, "is in my thoughts day and night, 'What hath God wrought?' It is His work, and He alone could have carried me thus far through all my trials."

An Honored Old Age.—Fame and some fortune now came to this steadfast man. The name of Morse was carried over all the civilized world. Morse would have liked the United States Government to take the patent for the telegraph and control all the telegraph lines in the country, but Congress decided against this. Soon, therefore, a private telegraph company was formed in Maryland and was called "The Magnetic Telegraph Company." Many other companies followed, and with the money that presently came to Morse from his shares

in the companies, he bought a beautiful home, Locust Grove, two miles south of Poughkeepsie, on the Hudson. Here he gathered about him his three children, now grown up, and enjoyed a real home for the first time in many years.

Telegraph lines were soon put up not only over the eastern part of the United States, but also in Europe. Morse gained little money but much honor from the European countries who so freely used his invention. At home he received a glory seldom given; a statue of him was set up in Central Park, New York, while he was yet living. Soon after the eightieth birthday of the famous inventor the bronze statue was unveiled, while the governor of New York delivered a speech. "Thanks to Samuel F. B. Morse," said the governor, "men speak to one another now, though separated by the width of the earth, with the lightning's speed, and as though standing face to face."

How Franklin Killed Morse.—Six months later Morse was dead. He had been asked to unveil a statue of Benjamin Franklin in Printing House Square, New York. It was a very cold day, but against the advice of his doctor, the brave old man insisted on being present. "I esteem it one of my highest honors," said Morse in his speech, "that I should have been selected to unveil this day the fine statue of our immortal Franklin. When requested to accept this duty I was confined to my bed, but I could not refuse, and I said, 'Yes, if I have to be carried to the spot!' "

Exposure to that chill January air was too much for the failing strength of Morse. The honor which he

paid to Benjamin Franklin cost his life. Through an illness of months, Morse gradually grew weaker. Toward the end of the sickness one of his physicians, tapping on Morse's chest to test his lungs, remarked, "'This is the way we doctors telegraph.'' For a moment the eyes of the dying man grew bright at the joke, and he murmured, "Very good." These were his last words.

Soon one of the friends of Morse wrote sadly, "The telegraph, the child of his brain, has whispered to every home in all the civilized world that the great inventor has passed away. Men as they pass each other on the street say with the subdued voice of sorrow, 'Morse is dead.' " From every continent came electric messages showing regret that he had passed away.

To-day the whole world is bound together by telegraph lines, for the cables carry the copper wires even under the seas. From across the ocean we receive almost immediately the news of events as they take place. Men understand each other better because of Morse's invention, and have greater power to act together and act quickly for all good purposes. The swift messages of Morse's telegraph have made the world more civilized.

FOR DISCUSSION AND LIBRARY WORK

1. What did the word "telegraph" mean as it was first used?
2. What kinds of telegraph besides the electric telegraph have been employed?
3. What had Morse invented before the electric telegraph?
4. How do expert operators to-day read the telegraph messages?

5. Was it fortunate or unfortunate that Morse was ignorant of the fact that other inventors had unsuccessfully tried to telegraph by electricity?
6. Morse had a dictionary plan for sending words. Find out what the plan was, and how it succeeded.
7. Are there any great means of sending news which our Government has taken under its direction?
8. What was Morse's thought about the influence of the Erie Canal on New York City? Has it come true?
9. Ezra Cornell was one of the men who helped Morse. Find out how he helped, how he became rich, and to what splendid purpose he devoted a part of his money.
10. What was Morse's cable experiment in New York Harbor?
11. How were the first photographs (daguerreotypes) different from those taken to-day?
12. Do you know of any men besides Morse who have had statues raised in their honor during their lives?
13. Why did Morse especially honor Franklin's memory?
14. Write a word in the Morse code, and sound it, using your pencil for a ticker.

ALEXANDER GRAHAM BELL

1847–

THE MAN WHO SENT THE HUMAN VOICE BY WIRE

"By the wondrous agency of electricity, speech flashes through space and swift as lightning bears tidings of good and evil."—*Inscription in the Boston Public Library.*

THE SPEAKING TOY

The Talking Skull.—"Come see what a wonderful thing Alexander Bell has made," said one thirteen-year-old boy in Scotland to another; "you have never seen anything to equal it, I'll warrant." The two lads rushed off to Alexander's home. Sure enough, there he had a grinning skull, not of white bone, however, but of black India-rubber, for he had shaped it himself.

ALEXANDER GRAHAM BELL

The real surprise lay inside the skull. Hidden within it were pipes like those of an organ, only much smaller. Alexander did not allow his friends to guess what he was about to do. He blew with a hand-bellows through these in turn, and thus made sounds which combined into words. The eyes of the boys nearly popped out of their heads with surprise.

Active Alexander.—Alexander Graham Bell, this boy who, about the time of our Civil War, made the talking skull, came from a family of people who studied talking. His grandfather invented a way to cure stammering; his father was a famous elocutionist and wrote several books on the art of correct speaking; so it was natural that young Alexander should try to make something that was not alive talk as though it were living.

As Alexander grew up, he did very much as he pleased. He went where he chose and studied the things he liked. At sixteen, however, he had learned a great deal in his own way, and he left home to seek his own fortune by teaching elocution in an English school.

People said, "Alexander Bell will make either something great or nothing much out of himself." There was no dull middle course in Alexander's nature. Whenever he took up a new thing he was all on fire with interest. Life seemed a great game to the young fellow. Something novel to do, and to enjoy while doing it, constantly occurred to his mind. Just to look at Alexander, tall and slender, with a pale face out of which shone his bright black eyes, you would have known what an eager, headlong lad he was. What an active brain worked under that bush of curling black hair!

A New Home. Bell, the American.—While Bell was teaching, he continued to experiment on sounds. He found out that a current of electricity sent over a wire would make a tuning-fork sing at the far end of the wire. Bell knew a great deal about Morse's telegraph, which by this time had grown familiar to most people.

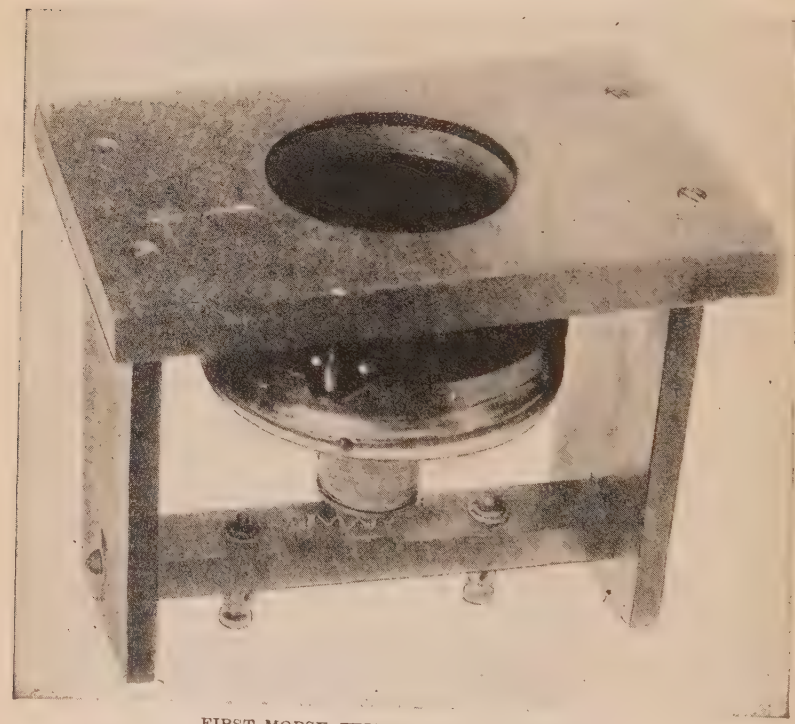
"Perhaps I can make a better telegraph than Morse did," thought Bell. He dreamed of a telegraph which should have a piano keyboard and which in some way could send many messages at once over a single wire.

But in the midst of his work and his dreaming, Alexander, then twenty-three, fell sick and returned to his home in Edinburgh. When the doctor came he shook his head. "Your two brothers died of consumption," said he, gravely, "and if you do not wish to go their road you must seek another climate."

As soon as Mr. and Mrs. Bell heard the doctor's warning, they said, "Alexander, we will go away with you." The three took a steamer from Glasgow and went to a little town in Canada. In that cool, dry, bracing air Alexander's health improved rapidly. He could not bear to be idle, so he employed his time in teaching a class of deaf and dumb children how to speak. Alexander proved to be such a kind and clever teacher that these unfortunate children learned wonderfully well under his care. Every one who saw them was amazed at their progress.

After a year of happy, healthy, busy life in Canada, the doctors pronounced Alexander entirely cured. But the glad news had to be sent to Professor Bell, who was making his living by lecturing in various cities. In Boston, Professor Bell spoke of his son's wonderful success in teaching deaf and dumb children. A school for such children had just been opened in Boston by the Board of Education. "If your son will come to Boston and show us how he teaches, we will give him five hundred dollars," said the men of the Board.

Alexander agreed to go to Boston. It was his first trip into the United States, and he thought that he would soon return to Canada or Scotland; but fate decided otherwise. His work pleased the Boston



FIRST MORSE TELEPHONE TRANSMITTER

people. One day Dom Pedro, the Emperor of Brazil, came to the city. Brazil was a new and backward country, but its emperor was a very intelligent man. In order to learn of good things which he might introduce into his own land, he spent much time in traveling

about the United States and Europe. The Boston Board of Education could find nothing to show Dom Pedro that was so interesting as Bell's class. The Emperor spent a long while observing Bell as he taught in Boston University and was greatly pleased with the young man's skill. It was not the last time that the emperor and the teacher were to meet.

The Cellar Workshop.—Beside teaching at Boston University, Bell opened a successful and profitable school of his own, to train persons to speak well. For two years he was so busy with teaching that he laid inventing aside. Strangely enough, it was through one of his deaf and dumb pupils that Bell again took up his work on the "new telegraph."

Mr. Sanders, a citizen of Salem, near Boston, asked Bell to give private lessons to his little five-year-old boy George. To make it easier for Bell to teach George, Mr. Sanders said, "Mr. Bell, won't you make your home with us for awhile?" "Awhile" turned out to be three years. Mr. Sanders became very fond of Bell. He liked to hear about the young man's experiments, and from talking about them, Bell fell into the humor of taking them up again. "You may use my cellar for your work," said Mr. Sanders; and Bell at once began to fill the cellar with wire, tuning-forks, magnets and batteries.

In the cellar Bell worked alone nearly every night, trying to make sound come over wires. Whenever he thought he had improved his apparatus, he would rush to get Mr. Sanders. In the middle of the night the poor man would often have to leave his warm bed and travel

down to the cellar. Then Bell would run to the barn, his black eyes snapping with excitement, and begin to send signals over his wires to Mr. Sanders. If he saw any change for the better, he would jump about and whirl around in a wild war-dance.

Bell and the Two Fathers.—Another one of Bell's pupils had a great influence upon his life. This pupil was a girl of fifteen years, Mabel Hubbard, who had been made deaf when a baby through an attack of scarlet fever. Mabel was a sweet, lovable girl, and the young teacher lost his heart to her. In return, Mabel gave her love to the man who had brought her out of silence by showing her how to talk with other people.

Mabel Hubbard's father, a well-known and prosperous lawyer of Boston, saw that his daughter and Bell cared for each other, and he became interested in Bell's success. The more he heard Bell talk, the more Mr. Hubbard believed in him. "If your musical telegraph is successful," said Hubbard to Bell, "it will make you a millionaire."

As Bell had given up most of his teaching in order to devote the time to his invention, Mr. Hubbard and Mr. Sanders joined in paying the expense of the experiments. To the disgust of at least one of the men, Bell struck off on a new track. "I now want to make my wires carry, not musical notes, but the human voice itself," thought he. "If I can make a deaf and dumb child talk," he said, "I can make iron talk." But how?

A Dead Man's Ear.—For months Bell pondered over the great question. "Forget that nonsense," angrily advised Mr. Hubbard. "Throw it out of your mind

and go ahead with the musical telegraph." That was easy to say, but the pale, earnest young inventor could not forget it. "How can the voice be carried?" was ever in his mind.

Bell took his problem to a friend, Doctor Blake. "Why don't you try the experiment with a real ear?" said his friend. The doctor cut from the head of a corpse an ear with its tiny ear-bones. Bell arranged it so that one end of a straw touched the drum-head of the ear and the other end rested against a piece of smoked glass. Then the inventor shouted into the ear. The drum-head shook, the straw trembled with it and made marks upon the glass.

"Is he crazy," people might have questioned, "this young man who is so busy with talking into a dead man's ear?" No, Bell was far from crazy. He noticed how thin and delicate was the drum head, and yet how well it made the waves of sound move along the straw. "If I put a thin iron plate in place of the human drum-head," thought he, "then it could send sound-waves along an iron wire. This could make another iron plate shake or vibrate at the far end of the wire. The same sound-wave that goes into one end of the wire will come out at the other." Bell was on the right track at last.

II. THE WONDER OF AMERICA

Discouragement and Encouragement.—Just as fortune seemed to smile upon Alexander Bell, a shadow fell across his path. Mr. Sanders and Mr. Hubbard threatened that they would pay out no more of their good money for Bell's experiments on speaking by wire. If

he would keep on trying to improve Morse's telegraph, these two backers were willing to furnish additional cash, otherwise—no contributions.

Poor Bell felt discouraged. "It seems to me that I am on the point of making a great invention," thought he. "Must I give it up for lack of a little money?" Yet the inventor had no money of his own. "Can I bear to give up my telephone experiments?" said Bell to himself. "But can I afford to keep on?"

In this perplexing case, Bell's chief comfort came from Mabel Hubbard. She encouraged him when he was sad, she followed with interest each step of his experiments, she even wrote his business letters. But the future seemed to Bell most uncertain. At times he even doubted whether the idea of a telephone could be worked out at all.

While hope along this line seemed dead, Bell was called to Washington. He had to borrow from Mr. Sanders the price of his ticket, and he stayed at the home of a Washington friend to save a hotel-bill. There lived in the national capital Professor Joseph Henry. This deep thinker knew more about electricity than any other man in the United States, and he had worked on Morse's telegraph before Bell was born. "I will consult Professor Henry about my telephone,"[1] said the young man.

The two men, one old and one young, put their heads together over Bell's instrument. At last the professor made his statement. "You have the beginning of a wonderful thing," announced Henry. "Keep at it until

[1] Telephone is Bell's own name for his invention.

you have made it complete." From his conversation with Professor Henry, Bell departed greatly encour-

MR. BELL OPENING THE NEW YORK—CHICAGO LINE, OCTOBER, 1892

aged. He returned to Massachusetts ready to work with fresh spirit.

A Clock-Spring Twangs.—Bell's two backers, however, made him promise to go ahead in the line which they desired; so, putting aside for the time his telephone idea, he labored to make the "harmonic telegraph" a success. The instruments for this were made at the shop of Mr. Williams, 109 Court Street, Boston, near Scollay Square. Young Thomas Watson, who did the work, became deeply interested in Bell's schemes, and was quite willing to stay in the evenings to help Bell test the instruments.

But the "harmonic telegraph" did not work well. All through the winter and the spring Bell and Watson struggled along until it became a perfect nightmare. June came. One hot afternoon the two friends, almost disheartened, were busy in the garret of the Williams building. Their telegraph wire connected two rooms some distance apart. In one room Bell was tuning up his receiving instruments, while in the other Watson tinkered with pieces of clock-spring at the sending end of the wire.

The springs in Watson's room were set vibrating by magnets. One of these springs, by a freak of the apparatus, failed to vibrate. Watson twanged it to set it vibrating again. It did not start; again he twanged the spring. The next moment there was a shout from Bell, and into the room he rushed. "What did you do then, Watson?" he demanded. "Don't change anything. Let me see!"

The Baby Telephone Speaks.—What had happened? The explanation was easy. The sticking of the apparatus had allowed a continuous current of electricity to

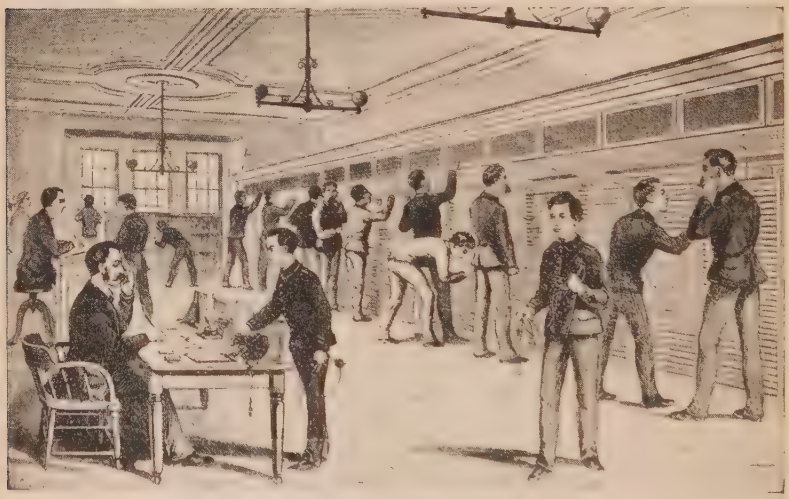
flow over the wire to Bell's instrument. Just at the right time Bell had happened to put his ear at his instrument and the current had faintly brought to him the twang of the far-off spring.[2] Instantly the keen mind of Bell recognized that speech would carry over the wire in a similar way. Accidentally he had found a simple method to do the work for which he had expected to need a very elaborate set of instruments.

Excited and happy, Bell gave Watson directions for making a real telephone which they could test the next evening. It was finished in time, and Watson on the third floor of the building and Bell in the garret two flights above tried to talk to each other. Shout as he would, Watson's voice failed to carry to the garret, but Bell's strong, clear voice came to Watson's ear, though the words were not understood. Almost wild with delight, Watson rushed up the steep stairways to bring the news that the telephone worked.

After that the perfecting of the telephone was only a matter of time. Soon the two experimenters were able to distinguish occasional words; but it was March, 1876, nine months after the first discovery, before the baby telephone uttered its first entire sentence. Then, with Bell's voice, it said: "Mr. Watson, please come here. I want you." Though not so noble a first message as that which had been sent thirty years before over Morse's telegraph line, these words were just as important to the world.

[2] The receiving instrument at which Bell was working was intended only to make various springs vibrate whenever corresponding springs, tuned in harmony at the sending end of the wire, were pressed to make dots and dashes.

An Unexpected Trip to the Centennial.—Two months after the telephone had found its voice, the great Centennial Exposition opened in Fairmount Park, Philadelphia. One hundred years had passed since the United States had declared in 1776 that it was a free and independent nation. The Centennial Exposition celebrated that hundred years of our national life. All



AN EARLY TELEPHONE EXCHANGE

the most wonderful productions of the country were gathered into the immense Exposition buildings.

Mr. Hubbard happened to be one of the Exposition managers. He secured for Bell a chance to show his telephone, which had now been patented. The only spot Bell could secure was a little table in a retired room, and on this the telephone instrument was placed.

Bell, however, did not plan to go to the Centennial,

for he was too poor. "The telephone will have to speak for itself," he thought. But one afternoon he went to the train with his sweetheart Mabel, who was starting off for Philadelphia. Mabel thought that Alexander would surely go with her, and when she found he intended to stay at home, she was bitterly disappointed. As the train began to move, tears rolled down Mabel's cheeks. Bell, who stood on the platform watching his sweetheart, could not endure the sight. He dashed after the train, sprang aboard, without money or baggage, and went merrily off to Philadelphia, trusting as usual to borrow the needed funds.

The Friend of the Emperor.—As it turned out, this headlong decision to go to the Centennial was the luckiest act of Bell's life. The day after he arrived in Philadelphia, the judges were to make their trip of inspection in order to give medals for the best articles shown. Bell's telephone had been standing on its little table for six weeks, and no one had taken special notice of it; but now that Bell himself was present, he hoped that the judges would see its value.

That June day Bell sat at his telephone table, waiting for the judges to arrive. He waited a long time. The judges were busy examining the first electric light and the first reaper and binder and many another marvellous thing. Not until seven o'clock in the evening did they reach the spot where sat Bell.

The judges were hot and tired and hungry. They glanced at young Bell and his machine, and saw nothing wonderful about either of them. Bell explained the telephone, but the tired judges scarcely listened. Some

of them laughed. "Another crazy idea," said they. Bell's heart sank down, down, down.

Then the strange thing happened. A tall, fine-looking, bearded man, with a group of men and women about him, entered the room. The judges looked at him respectfully, for he was Dom Pedro. But just then the Emperor had no time to waste on the judges. Straight up to Alexander Bell he went, with both hands outstretched. "Professor Bell," he exclaimed, "I am delighted to see you again!" The surprise of the judges knew no bounds. How was it possible that this unknown young man could be the friend of an emperor? They soon found that Dom Pedro had never forgotten the fine teaching which Bell had shown him.

The Star of the Centennial.—Now every one became interested in the invention by the emperor's friend. Dom Pedro was the first to pick up the receiver of the telephone, but he was not sure what would happen. Bell went to the other end of the vast room and took up the transmitter. In a moment the Emperor raised his head in surprise. "My God," cried he, "it talks!"

Old Professor Henry had been in the emperor's party, and came next. The bystanders wondered at the look which came into his face as he heard a voice speak from the iron plate. Then a noted Englishman, the engineer of the first Atlantic cable, stepped up. "This is the most wonderful thing I have seen in America," he declared.

For more than two hours the judges, forgetting their weariness and hunger, played with the telephone. They could not get enough of the talking wire. Next

day they brought the telephone out of its corner and took it to the judges' hall, where it would be seen by every distinguished visitor. All the rest of the summer it was the wonder of the Centennial.

The Honor of the Telephone.—Although the telephone's reception at the Exposition proved so successful, people in general thought it was a fraud. Most of the men who were supposed to know about electricity said, "It can't be done." One fellow declared that there was a hole through the middle of the wire. But Bell went about the country lecturing and showing the wonders of the telephone. Hundreds of articles about it were published in newspapers and magazines. Slowly the people of America realized that talking over a wire was possible, but they were slower yet to use that power.

From Washington Mr. Hubbard secured a young man named Theodore Vail, a cousin of the Alfred Vail who, a third of a century earlier, helped Morse to gain his success. Theodore Vail became manager of the Bell Telephone Company. Alexander Bell was an inventor, but no business man. Under Vail's capable direction, however, the telephone business grew by leaps and bounds.

To-day, although the telephone is in use in many lands, there is no country that puts it to so much use as does the United States. In America Bell's telephone has beaten Morse's telegraph and Franklin's postal service. Many more messages are sent every day by telephone than by telegraph and letter combined. After many attempts, men have succeeded in talking

by telephone across our continent—three thousand miles from ocean to ocean.[3] The space that the highest-speeded railroad trains take over five days to cover is bridged by the telephone message in a second.

Could we carry on modern business without the tele-

MODERN TELEPHONE EXCHANGE

phone? We cannot imagine such a thing. The telephone has brought business men close together; but it has done more than that. It has brought the whole people of America close together. Our big country

[3] When President Wilson, in 1919, crossed the ocean to France, his ship, the *George Washington*, was reached constantly by wireless telephone until he landed at Brest.

needed Bell's marvelous invention to save us from growing apart, to keep us friendly, and to preserve that which our makers of the Constitution desired—"a more perfect Union."

Alexander Graham Bell still lives (1919). Rich and honored, he makes his home in the city of Washington, where quietly but tirelessly he carries on work for the benefit of the deaf-and-dumb. He has also done much to make man conqueror over the air by flight. Even his telephone has been able to do away with wires in many cases, and to send messages through air alone. Though in 1915 it was Theodore Vail's voice which spoke by wireless telephone across our continent, we shall always remember that it was Alexander Bell who opened the door for that great achievement.

FOR DISCUSSION AND LIBRARY WORK

1. What institutions in your own neighborhood teach deaf-mutes to communicate with other people? How is this done?
2. Show how Bell's teaching ability brought his success.
3. Draw a diagram of the hearing part of the ear.
4. What important expositions have been held in the United States since the Centennial? What did each celebrate?
5. Who is "emperor of Brazil" to-day?
6. Describe the telephone and its workings to a person who has never seen a telephone.
7. Imagine that all the telephones in your community were destroyed some night. Describe the trouble that would result next day.
8. What special forms of language must be used over the telephone in business and social life? Why is such a "telephone code" necessary?

THOMAS ALVA EDISON

1847–

THE WIZARD OF ELECTRICITY

I. THE ROLLING STONE

Little Thomas and the Eggs.—A few years after Morse's telegraph had come into use, Thomas Edison, a delicate-looking little fellow, lived in a small town of northern Ohio. The neighbors said, "Thomas is a

TWO DYNAMOS

queer child. He has such a large head; he does not care to play with other boys; and he asks so many questions." That large head, however, held an active brain. It was because he wanted to learn that the boy tormented other people with his queries.

To try experiments was Thomas's delight. One day when he was about five years old, he noticed a big white goose sitting on a nestful of eggs in the barn. A week or so later she led around the yard a flock of tiny yellow goslings. "Where did those little geese come from, mother?" asked Thomas. "The goose hatched them from the eggs by the warmth of her body," answered Mrs. Edison.

Thomas said nothing more; but in a short time his mother found him sitting in a nest of hay. The nest was filled with goose-eggs and hen's-eggs, which Thomas was trying his best to hatch. Could a boy hatch anything but trouble in that way? Of course, the mother and father laughed themselves nearly sick. They did not foresee that Thomas Edison would succeed in life through trying strange experiments.

From Ohio to Michigan. Thomas in School.—Milan, where Thomas lived, was an interesting little town. Perhaps it would be better to say that Thomas was interested in the work which was carried on in Milan. Much wheat grew in that part of Ohio; it came in thousands of wagon-loads from the farms into Milan, and then canal boats took it to Lake Erie. At the lake men loaded the bags on sailing-vessels which unloaded the wheat again at Buffalo, where it began another voyage —this time on De Witt Clinton's famous Erie Canal. Though Thomas was too small to know all this, he loved to watch the handling of the grain. On one occasion he fell into a great bin of it, and nearly smothered before some one pulled him out; but he learned a great deal

from observing the workmen at the wheat store-houses and on the canal.

By the time Thomas reached the age of seven, a railroad was built through that part of Ohio. It did not touch Milan. People found that the small canal could not serve them so well as the railroad; therefore, business left Milan and went to the nearest town along the iron track. Mr. Edison's lumber business suffered, and he moved to Port Huron, Michigan, where there was a railroad.

In Port Huron Thomas went to regular school for the first time. It was also his last time. Though he liked to learn, it seemed as if he had to learn in his own way. There is no doubt that his absent-minded conduct severely tried the teacher's patience. Partly because he was so absent-minded and partly because his health was poor, Mrs. Edison, after three months, took Thomas out of school. Fortunately, she had been a teacher. By instructing her son alone, she was able to give him a good beginning in education.

Experiments in Chemistry. Michael Fails to Fly.— Thomas had no difficulty in learning to read. Few story-books were at hand, so he read the books of grown-up people. For each book Thomas finished, his father gave him a small sum of money. One of the volumes that came into his way, when he had reached the age of eleven, was a school-book on chemistry. This interested him very much. He went about the town with a basket, picked up all the bottles to be found, filled them with every chemical which he could afford to

buy, and put them on shelves in the cellar of his home. There he tried hundreds of experiments.

One of the experiments proved distressing. Michael, a poor German boy, did odd jobs about the Edison house and garden, and Thomas often called on Michael to help in his chemical work. One day he bought from the drugstore some Seidlitz powders, which were often

EDISON AT THE AGE OF FOURTEEN

sold as a dyspepsia medicine. There were two kinds of these powders; when mixed together, they foamed up. "Instead of mixing these just before you drink them, Michael," said Thomas, "take several of each kind separately, then drink a lot of water. They will make gas, and perhaps you will be so light that you can fly." Poor Michael obeyed. The powders did make plenty of gas in his stomach; but instead of flying, all

he could do was to roll about in pain. The reward Thomas received for that experiment was a good switching by his mother.

The Room in the Baggage-Car.—Buying chemicals took all of Thomas's pocket-money. He had also read all the books which he could find. "If you will let me be a train-boy on the railroad between Port Huron and Detroit," said he to his parents, "I can earn money for my experiments and I can get the new papers and magazines to read. Beside, I can spend my spare time in Detroit at the public library." Mrs. Edison at first felt very unwilling for her twelve-year-old boy to go into that business, which would take him away from home for so much of the time. At last, however, she gave her consent, and Thomas, or "Al," as he was often called, began to sell newspapers, fruit, and candy on the train.

Small, active Thomas was a good business man. Beside his regular sales to the passengers, he sold in his home town vegetables, berries and butter, which he bought from the farmers along the railroad. He even employed other boys to sell the goods which he provided. But Edison did not care to save the money he made. Every day he gave his mother a dollar; the rest of his profits he felt he was entitled to spend as he pleased. He chose to lay it out in chemicals.

In a little room at one end of the baggage-car Edison kept his stock of candies and newspapers. To this space he moved most of his jars, bottles and electric batteries. Glad enough, no doubt, was Mrs. Edison to see them cleared out of her cellar. In the intervals be-

tween "Al's" trips through the cars he often went ahead with his experiments. George Pullman, who then lived in Detroit, and who was working on the invention of a sleeping-car, pleased "Al" very much by making him some wooden racks to hold the glass bottles and tubes.

The tiny room on the train was not only a chemical laboratory, but it also grew into a newspaper office. In Detroit Edison managed to buy a little printing-press, and as the cars rattled along he printed the "Weekly Herald." It was a clever paper for a boy just fifteen to compose and publish. The telegraph operators along the line were quite proud of it, for it was the first newspaper in the world to be printed on a moving train. They often gave their friend "Al" important news for his *Herald* which they had heard by wire, but which the Detroit journals had not yet printed.

A Setback to Chemistry.—With his goods, his chemicals, and his newspaper, Edison was a busy and happy boy, but a stroke of ill-fortune came his way. As the train rushed over the rails one day it gave a violent lurch. A stick of phosphorus fell off the shelf in Thomas's little room and it set the floor on fire. Scared though he was, Thomas bravely tried to beat out the flames, but with little success.

The conductor smelled the smoke and appeared on the scene. By the combined efforts of the two the car was saved from destruction, but the conductor, who had been slightly burned, was an angry man. At the next station, Edison, with ears soundly boxed, was thrown

out on the platform. His precious chemical apparatus and his printing-press were flung after him, and as the train steamed away he was left discouraged and in tears among his broken belongings. That was not the end of his misfortune, for the cuffing of his ears by the conductor rendered him almost deaf for the rest of his days.

The Boys' Telegraph. A Rescue and a Reward.— Though he did not lose his position as train-boy, Edison made no more chemical experiments on board the cars. Instead, he, with his chum, John Ward, determined to set up a telegraph line. It would be great fun, they thought, to talk from one boy's home to the other's. They installed their batteries and used ordinary iron wire to carry the electric current. The wire was "insulated" [1] with glass bottles set on nails driven into trees and posts. In good weather messages flashed perfectly along the line, but when rain came the telegraph went out of business. The boys soon became expert in receiving and sending messages in the Morse code.

One summer day during the Civil War, the young newsdealer was standing on the platform of a railroad station. A train was shifting freight cars. One car had been pushed out on the main track and was rolling rapidly along with no one on it. In its path sat the little son of the station agent, playing with the gravel ballast, never suspecting that the car was about to crush him.

Edison's cap flew one way and his papers another, as he dashed to save the child. He reached the boy,

[1] Insulation prevents the electric current from escaping before it reaches the proper place.

snatched him up, and fell with him outside the track. As they fell, the car-wheel struck the heel of Edison's shoe. It was a close call.

To show his gratitude, the station agent offered to teach Edison the business of a railroad telegraph operator. Nothing could have better pleased the lad. With his own hands he made in a Detroit gun-shop a neat set of telegraph instruments. Giving up most of his duties as train-boy, he practised for every spare minute, and in a few months became a regular operator.

But Edison stayed in this position only a short time. An accident happened on the railroad. Edison was blamed for it, and he resigned. There was work everywhere for a skilled telegraph operator, so Edison left home and began to wander from one city to another as the humor took him. For five years he drifted about over numerous states. He knew almost every important city between the Appalachians and the Mississippi. But wherever Edison went, he never ceased to study, to experiment, to invent.

II. FORTUNE ARRIVES

A Failure in Boston.—At the age of twenty-one Edison's wanderings led him to Boston, where one of his friends had secured for him employment with the Western Union Telegraph Company. The other operators in the office laughed when they saw the boyish, awkward, poorly dressed newcomer from the West; but Edison soon showed them that he was their master in skill. In Boston he often visited the electrical workshop of Mr.

Williams, in Court Street, where, seven years later, Alexander Graham Bell first heard the voice of the telephone. Edison, too, invented a machine which he thought would become famous, an improved telegraph.

To bring his invention into notice Edison took a great risk. He gave up his position in Boston and even borrowed nearly a thousand dollars from his friends. The machine did not succeed. Poor Edison found himself in debt and out of a job. For partial payment of his debts he sacrificed even his books and instruments, keeping only enough money to pay his steamboat fare to New York.

Edison Fixes a Machine.—With only a few cents in his pocket, Edison landed in the big city. He had not even enough to buy a good breakfast, but he knew one man in New York, and proceeded to hunt up his friend. When, after hours of search, the friend was found, he was also out of work. The help he gave Edison was to lend him just one dollar. However, a skilful operator like Edison did not need to be long without work. He applied at the Western Union office, but learned to his dismay that there would not be an opening for several days.

In the heart of the business part of New York was the office of the Gold and Stock Telegraph Company, which sent out constantly to brokers the changing prices of gold.[2] A big machine telegraphed these prices over more than three hundred wires at once. In order to make his dollar go as far as possible, Edison persuaded

[2] The price of gold controls the prices of all other articles in most civilized countries.

the operator of this machine to let him sleep in the battery-room behind the main office.

During the days of his waiting for a position, Edison, having no other special place to stay, spent much time in the main office of the company. He studied all the instruments, and especially the big machine which sent the messages. On the third day of Edison's enforced idleness, while he was sitting in the main office, the machine stopped short with a crash. In two minutes the room was filled with a howling mob of boys from the brokers. "Our wires are not working!" they yelled. "Fix them right away!"

The excited operator, forgetting everything he knew about the machine, stood helpless. Edison, however, kept his head and went to find the trouble. So thoroughly had he studied the instrument that he saw in an instant the cause of the stoppage. One of the many springs had broken off and fallen down between two wheels. Before Edison could tell the operator what was wrong, Dr. Laws, the head of the company, rushed in. "What's the trouble?" he demanded; but the operator was speechless.

Edison came forward. "I can tell you," said he. "Fix it, then! Fix it! Be quick!" shouted the doctor. Edison did so. In two hours everything was again working smoothly. The face of Dr. Laws beamed with pleasure. "Who are you, and where do you work?" he questioned Edison. Upon hearing Edison's answer he ordered, "Come to my office to-morrow."

On the morrow Edison promptly appeared. The doctor asked him many questions. Edison by his an-

swers showed that he not only knew the workings of the company's instruments, but that he could improve on them. "Come again to-morrow," directed Dr. Laws. There was a surprise in store for the young fellow. As soon as Edison arrived on the next day, the doctor declared, "I am going to give you charge of the telegraph system here. Your salary will be three hundred dollars a month."

Edison nearly dropped to the floor. "If twenty hours of work a day will deserve that salary, I will give them," thought he. For about two years he worked day and night. Four or five hours of sleep seemed to give him plenty of rest. Many inventions, which he patented, came from his busy brain.

Money Makes Trouble.—At last General Lefferts, who had become head of the company, called Edison to him. "Now, young man," said he, "we want all your patents. How much do you think you should receive?" This matter had been in the air for some time. Edison had concluded that for his time and thought he ought to have five thousand dollars, but that if necessary he would accept three thousand.

Not being bold enough to name such a large sum as five thousand dollars, Edison answered timidly, "Well, General, suppose you make me an offer." "How would forty thousand strike you?" asked the General. Edison's heart beat so loudly that he thought the General must hear it. "That seems fair," he managed to gasp. "Very well," returned General Lefferts. "You will get the money in three days."

At the end of the three days a contract was ready

for Edison to sign. He wrote his signature without reading the contract, for he could not yet believe it was true. Then the General handed to him a check for the large sum the first check which Edison had ever received. It was on the Bank of New York, at the corner of Wall and William Streets.

Edison posted off to the bank for his money. When he passed in the check at the paying-teller's grated window, the teller pushed it back. "Endorse it," said he. Edison, being quite deaf, did not understand the words, but thought they meant that the check was worthless. "I've been cheated!" he thought, and a cold perspiration broke out on his forehead.

Back rushed Edison to General Lefferts, who rolled about in his chair with laughter. "He meant you should write your name on the back of the check," said the General, as soon as he was able to speak. "I'll send my secretary with you to identify you."

There was no further trouble about getting the money, but there was trouble when the money was gotten. The teller saw Edison's ignorance of business, and, deciding to have his little joke, handed out the forty thousand dollars in packages of small bills. Edison filled all his pockets with the bank-notes until he looked as though he were stuffed. What should he do with all this wealth? In his boarding-house at Newark he sat up the whole night for fear he should be robbed. Next morning he carried back the money to the General, who took pity upon him, and showed him how to open an account at the bank.

Fortune, Fame and Family.—Now Edison was free to work as he chose. Few young men of twenty-three had ever reached such success. With his newly earned money he rented a four-story building in Newark and employed fifty men to manufacture the machines which he invented. Soon orders poured in until it was necessary to run day and night. Edison directed all the work; half an hour of sleep three or four times a day seemed all that he needed. The business men of the telegraph world put confidence in his ability to make machines and, better still, came to him whenever a new electrical invention was desired. Before Edison was twenty-five he had become rich and well known.

Soon the two great telegraph companies of New York offered Edison a large sum just to give them the first chance to buy any of his new telegraphic improvements. From the time of this bargain Edison kept three hundred workmen busy in his Newark shop, and in three years he had cleared four hundred thousand dollars. Though so busy, Edison found time to fall in love with Mary Stillwell, one of his employees. The story is told that very late on the evening of the wedding-day one of Edison's friends passed by his shop. Light showed that some one was working there. The friend entered the unlocked door, and found Edison bending over some instruments. "Look here, Tom," remarked the intruder, "what are you thinking about? It's past midnight. Aren't you going home?"

"What, as late as that?" said the inventor. "And this is my wedding day. Yes, I must go home."

The Master of Menlo Park.—In the spring of 1876, the year of the Centennial Exhibition, Edison decided to move his workshops to Menlo Park, New Jersey, a little railroad station about twenty miles from New York. The settlement had only seven or eight houses. The best one of these Edison bought for his home, for he had now two little children, a girl and a boy, whom he liked to call by the appropriate names of Dot and Dash.

Close to the station Edison put up a group of buildings. One was a big two-story laboratory, and another a splendidly fitted up machine-shop. The walls of the laboratory were lined with shelves on which were stored all kinds of chemical material. Long tables stood in this hall, filled with instruments of the greatest variety. An organ occupied the background, not for experiment, but for pleasure alone. The boy who worked with chemicals in his mother's cellar had never dreamed that some day he would be able to own a laboratory like this and direct the experiments of a score of clever helpers.

In the laboratory Edison was more usually found by night than by day. Indeed, he cared little for the course of time. When work called him, he and his men rushed at it and got it done. Often, after working into the early morning hours, Edison lay down on one of the laboratory tables, with a couple of books for a pillow, and instantly fell into dreamless sleep. "A soft bed spoils a man," said he. His strength seemed to have no limit. Under his leadership a marvellous series of inventions came forth to astonish the world, and little Menlo Park grew to be a place sought by visitors from many lands.

III. MARVELLOUS INVENTIONS

Edison and the Telephone.—The year when Edison established himself at Menlo Park was the year when Bell's telephone came into public notice. The present telephone receiver had been used by Bell as a combined receiver and transmitter. After speaking into the queer thing a man would hold the mouthpiece to his ear and hear the answering voice. The sound that Bell's telephone made was very faint, and could be heard well by most people only in a quiet spot.

The manager of the Western Union Telegraph Company wanted to rival Bell. He called Edison to his help. "I want to have a better telephone than Bell's," said he. Here was real warfare—a great genius against a great genius. In a few months Edison the wizard had produced an immense improvement, the transmitter into which we speak to-day.

"How much do you want for your invention?" asked the manager. "Twenty-five thousand dollars," thought Edison, but aloud he remarked, "Make me an offer." "One hundred thousand dollars," the manager briefly answered. "All right," said Edison, "but pay it in this way—six thousand a year as long as the patent runs—then I can't spend it so fast."[3] Money interested the inventor only as it gave him power to search into the secrets of nature and to push along civilization. This telephone on which Bell and Edison both labored has been one of the great inventions through which civilized people so easily and cheaply carry on the work which civilized life demands.

[3] The term of a patent is seventeen years.

The Phonograph.—From Edison's work with the telephone he knew that a thin plate or disk would shake with sound waves. "If I can make a record of the move-

THOMAS ALVA EDISON IN HIS LABORATORY

ments of such a disk," thought Edison, "that record will reproduce the sound whenever I please." He set to work, and designed a cylinder with grooves like a very fine screw. This cylinder was to be covered with tinfoil. When a person spoke into the mouthpiece of

the machine which Edison planned, a disk would vibrate and a point on its under side would make a record on the tinfoil.

Edison handed his working drawing to one of his men. "Make that, John," he said. John started in without question. When he had nearly finished, he came to Edison, asking, "What is this for?" "This is a talking-machine," answered Edison. John stared in amazement, and continued his work, thinking it a silly idea.

The machine was done. Edison himself had little faith that it would succeed; but with his own hands he put on the tinfoil. Then he shouted into the mouthpiece, "Mary had a little lamb." When, with mingled doubt and hope, he started the tinfoil cylinder afresh, it made the needle shake the disk, and, to his joy, the "phonograph" repeated the Mother Goose rhyme. "I am always afraid of things that work the first time," was one of Edison's sayings; but this invention "worked" beyond the shadow of a doubt.

The Wonder of a Nation.—Edison, John, and the other men sat up all that night experimenting with the wonderful machine. A stranger would have thought them crazy, as they recited and sang to the curious little phonograph. The next morning Edison tied it up in a package and took it to New York. Walking into the office of the *Scientific American,* he said to the editor, "I have something to show you." When the bundle was opened and the machine began its talking, such a great crowd gathered that the floor was in danger of giving

way. Nothing but such a danger could have stopped the exhibition from lasting all day.

Columns of description of the new invention appeared in the newspapers; all the people who read it were anxious to see the machine. Edison immediately built several larger and better machines and put them on show at Menlo Park. The Pennsylvania Railroad ran special trains there to carry the crowds. Edison was asked to bring his phonograph to Washington. He did so, and almost every important person in the city hastened to see it. As soon as he heard Edison had arrived, President Hayes asked him to bring the phonograph to the White House. Midnight had come when the inventor appeared, but Mrs. Hayes, who had gone to bed, rose and dressed, not wishing to miss the sight. It was a great triumph for the young man barely thirty years of age.

A company was formed to build and exhibit phonographs. One of the members of the company was Mr. Hubbard, the father-in-law of Alexander Bell. He knew a good thing when he saw it. The company paid Edison ten thousand dollars down and gave him a royalty on every machine that was sold. The people of America crowded to see and hear the wonderful talking-machine, and for awhile it was a great money-maker.

The kind of phonograph records used to-day, however, had not yet been invented. The tinfoil used by Edison as a record could not be removed from the machine without being spoiled. If it remained on the machine it wore out after the message had been repeated two or three times; then it had to be thrown

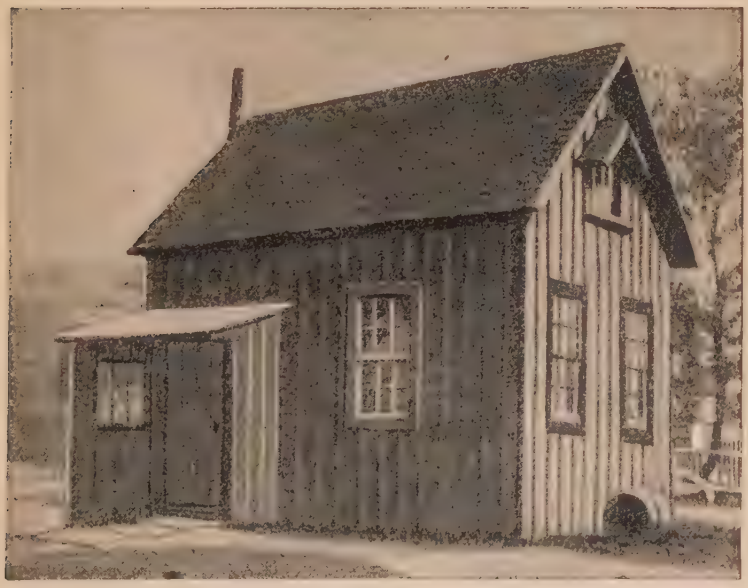
away. Most persons, therefore, after becoming acquainted with the phonograph as a curiosity, had no further use for it, and after a time the profits stopped. Edison's intention was to improve the phonograph, but it had to wait its time, for he had become engrossed in another invention.

Brightening the Home.—Edison's new line of experiment had to do with seeing, not with hearing. It dealt with the question of artificial light. When he was born in Ohio, lighting had made some advances in the many years since Franklin's day. People no longer had to depend on the open fire and the candle. Gas was made in the cities, and many streets and public buildings were illuminated by it, but very few houses were thus supplied. The oil lamp, however, had taken the place of the candle in most homes. Hundreds of vessels were still hunting the whale and bringing in its oil for the home lamp. Many people who thought whale oil too smoky used "fluid," a mixture of turpentine and alcohol, which gave a brilliant light, but was so likely to explode that both grown people and children had to be cautioned not to shake the lamps. Neither whale oil nor "fluid," therefore, was entirely satisfactory, and both were expensive.

About the time when Edison was making his first chemical experiments in his mother's cellar, great amounts of petroleum were discovered in western Pennsylvania. Refined oil from the ground (kerosene) soon took the place of oil from the sea, which was already beginning to grow scarce. Around the kerosene lamp in the evenings now sat millions of American families

with their books, games or sewing. "What a blessing in our home," said they, "is our cheap kerosene lamp with its steady light."

About the time of the great Centennial, some wise inventors brought out the electric arc-light. Its in-



SHOP AT MENLO PARK IN WHICH FIRST INCANDESCENT LIGHT WAS BORN

tense white brilliance made city streets at night still more safe and pleasant than gas had been able to do. The arc-lights, however, fine as they were for streets and parks, were too hot and glaring to be used indoors. "I must invent some kind of electric light, still better than kerosene, for the home," thought Edison. This was indeed a problem big enough to make Edison post-

pone work upon his phonograph, which though useful was not essential to people's comfort.

The Incandescent Lamp.—Even before he had invented the phonograph, Edison had worked to produce a small electric lamp, and as soon as the phonograph, though not perfected, was on the market, he eagerly turned again to his electric light experiments. His endeavor was to make a small closed glass globe from which all the air had been drawn. In this "vacuum" or empty space a thread of some material, by the passing of the electric current, would become so hot as to shine brightly. It would not burn away easily because the globe contained no air, and without air there can be no ordinary burning. So there the thread would remain, shedding its light around the room.

For more than a year Edison kept on with his experiments. He found out the best ways to make his little glass globes and to exhaust the air from them. But his perplexing question was, "What shall I use for the thread that glows within the globe?" In these trials he had spent forty thousand dollars; yet almost as soon as the threads began to glow they always broke. So near to success, yet not successful, Edison worked like mad. Meals and sleep were snatched by him and his assistant at odd times. The only thing in the world that mattered was the finishing of the lamp.

At last, after thousands of experiments, Edison tried in his lamp a loop of cotton sewing-thread, which had been prepared by being heated until everything had been burned from it except the carbon. As he turned on the current it passed through the thread.

which shone so white that the eye could not bear to look at it. "Now, if it only will not break!" cried Edison. "We sat and watched," says Edison's account, "and the lamp continued to burn. The longer it burned, the more fascinated we were. None of us could bear to go to bed, and there was no sleep for over forty hours." The "incandescent" [4] light was a success.

But the invention of the incandescent light was only a part of Edison's service in lighting up the world. He had to invent a whole electric system. From dynamo to lamp there were many steps. Many things which are so familiar to us that we take them for granted, Edison had to make. Sockets, switches, fuses, meters—all these came from the inventor's brain. The way of electric wiring had to be thought out. But Edison was equal to the task. When, in 1881, he displayed in Paris his complete electric system, men wondered how in two years, even with a hundred helpers, such a perfect plan could be made. In later years, a friend said to Edison, "Which of your numerous inventions do you consider the best?" "My lamp and my system of lighting," proudly replied the wizard.

IV. MORE MAGIC OF THE WIZARD

The New Homes.—While Edison was gaining fame at Menlo Park, his home there was broken up by the death of his helpful wife. When once again he was ready to set up a home, he decided to leave that spot. On the heights of the Orange Mountains, in New Jersey, not far from New York, Edison and his family

[4] "Incandescent" means glowing.

established themselves in a big, comfortable house, "Glenmont."

Within sight of "Glenmont," at the foot of the mountain, Edison built a new set of laboratories and workshops. The central building, as at Menlo Park, contained a great library-hall and a store-room for all kinds of rare and curious materials. These rooms, however, were far larger and finer than those at Menlo. The other buildings, clustered around, seemed to look up to this central structure with respect, for there were the headquarters of the man of genius whose conquering brain directed all.

Around the Edison plant stretched a high fence, and a stern gate-keeper barred the way to all visitors except those whose business was of high importance. No longer did Edison need to invite people to come see his inventions—his trouble now was to keep them away. Great scientists crossed the ocean to view the amazing creations of this marvellous man.

Honors came to Edison thick and fast. One hot day he was working on a new scheme. "Mr. Edison," said one of his assistants, "Professor Blank is here with a medal which his society has conferred upon you. It is a great and unusual compliment." "Tell him I am too busy to see him," answered Edison. Medals and compliments had little meaning for the inventor; he was so great as to be above them. At last Edison was persuaded to clean up, dress a little better, and receive the medal from the professor. "How many medals of this kind have you been awarded?" later asked a friend. "Oh, I suppose I have about a quart," said Edison.

The Old Invention.—Here at the Orange Laboratory Edison took up anew the problem of the phonograph. Before many months passed, he brought out the machine in a new and improved form, almost the same form which we use to-day. Now it could be a constant family pleasure. The needle, however, made its record on a cylinder with a wax surface; the old tinfoil sheet was used no longer. As yet the disk record had not been invented.[5]

The phonograph plays a wonderful part in our lives to-day. It gives us entertainment at home, cultivates our musical taste, and even teaches us foreign languages. Business men talk their letters into it. By the phonograph the great singer is made as immortal as the great artist. Since the original Edison patents have run out, many firms now manufacture phonographs, but the Edison is still in the field and is made in large numbers.[6]

The Motion Picture.—Fast following the phonograph, Edison's tireless, searching mind developed another wonder, the most impressive of all. For many years people had been thinking, "Can we not reproduce the photographs of moving objects so the pictures will indicate the motion?" In working at the task they found that pictures taken at the rate of twenty or thirty a sec-

[5] Other persons had been working on the invention and had also used wax cylinders. As they were not allowed to take the name "phonograph," which Edison had made his own, they called their machine the "graphophone." The first talking-machine to use disk records was called a "gramophone." To-day, in ordinary speech, we often call any talking-machine a "phonograph."

[6] At least 1,500,000 phonographs have been made up to the present time (1919) by the Edison company. 100 records for each phonograph have been manufactured.

ond, when shown again at the same speed, gave the eye the impression of motion. But how to take the pictures properly and how to show them again were the great questions.

Edison, who delighted in hard problems, turned his attention to motion pictures. For six years before he left Menlo Park he had been working on this matter at odd times. Now he went at it in earnest. A year after the improved phonograph appeared in 1888, the American people began to see in places of amusement a new machine called the Edison kinetoscope. Persons looked through the peep-hole of the machine while a crank rapidly turned over photographs of moving objects. The quickly changing pictures gave to the eye the impression that the objects actually moved.

Still, the kinetoscope with its cardboard pictures was not much more useful than the early phonograph with its tinfoil records. It was largely a toy. In a few years, however, a large photographic company brought out celluloid films to replace glass plates for taking pictures. These flexible films were just what Edison needed. Now the motion pictures could be run through a lantern and produced upon the screen. What pleasure and what knowledge the motion pictures give us to-day! Edison himself looks forward to the time when most school-books will be thrown aside in favor of lessons from the films. Do you think that day will come? Until recently, every large motion-picture company had to pay a royalty to Edison for using his patented inventions. He was the real founder of the great motion-picture business.

It would be impossible to tell of all the other amazing productions of this marvellous man, who preserved his youth at a time when most of his age seem old. In 1914, at the age of sixty-seven, Edison began a "drive" to still further improve his phonograph. For forty days he and his helpers bent all their strength to gain their goal. During all that time Edison slept only two hours a day, and those hours he took by naps of twenty or thirty minutes. Not once did he go to bed. If not needed, he lay down on a bench or on the floor and went to sleep instantly. When aroused, he rose immediately, ready to go at the work again. Though Edison and his men even cooked their own hasty meals in the laboratory, he came to the end of the forty days without loss of weight or strength.

"How is it that you keep your vigor, Mr. Edison?" asked a doctor. "Eating little and wearing loose clothing is the secret," answered the inventor. "Sleeping much is a disease, a bad habit. I do not poison my body with too much food, so I do not need much rest." Though all may not agree with Edison's health ideas, it is certain that to him work is a joy.

When Edison was sixty-eight, his factories at West Orange, employing thousands of people, were partly destroyed by fire. Many men would have said, "I am advancing in age, I am rich, and I shall not start my work over again." It was as natural for Edison to work as to breathe. Before the ruins had ceased to smoke, he had made his plans for rebuilding the plant. That was the never-say-die spirit that belongs to the truest Americans.

With strong mind and tireless energy Edison still carries on his studies, his experiments, his inventions. "I will drive the horse entirely out of the cities before I die," said he. How many other ideas that will change the world float in the wizard's mind, no one can tell. To stir up our old lives, to change everything, but to change it for the better, seems the delight of Thomas Edison.

During the Great War, Edison's wisdom served the Government well.[7] His life was thought so valuable that guards watched over him to see that no secret enemy threatened his safety. One man like Edison was worth many regiments of soldiers. The feeling of our country toward such a man is expressed by the words of the president of Columbia University as he presented to Edison a gold medal: "This medal is given you for distinguished human service and the greatest scientific achievements."

FOR DISCUSSION AND LIBRARY WORK

1. Why was Edison thrifty in spending his money on chemicals?
2. Put yourself in the conductor's place when the fire occurred on the train. How would you have treated Edison?
3. What steps must any one go through in making an invention?
4. How does your father deposit money in his bank?
5. Mention the forms of artificial light that have been used in America.
6. Prove the invention of the incandescent lamp was more essential to people's comfort than that of the phonograph.
7. What other necessary and common inventions work by means of a vacuum?

[7] His official position was that of head of the Naval Consulting Board. When asked by a friend if he would like to be Secretary of the Navy, Edison replied, "That would be too slow for me."

8. How old was your grandfather when Edison visited the White House with his phonograph?
9. How is the business man's "dictaphone" like and unlike the phonograph?
10. What are Edison's latest improvements to the phonograph?
11. Find out how the "poured house" invented by Edison differs from ordinary houses.
12. What other great man, at an advanced age, refused to be discouraged by the ruin of his industrial plant through fire?
13. Mention additional instances in which Edison showed remarkable vigor.
14. Are motion pictures, in your opinion, more helpful or more hurtful to mankind? Why?
15. What has Edison done to improve the automobile?
16. Show all the ways in which Edison the inventor has furnished opportunities to human beings.

LUCRETIA MOTT
1793–1880

THE FRIEND OF THE SLAVE

"Right principles are stronger than great names."—*Speech at the Philadelphia Anti-Slavery Convention.*

I. THE WOMAN PREACHER

The Little Nantucket Girl.—About the time when President Jefferson bought the territory of Louisiana, there lived on the island of Nantucket, south of Cape Cod, Mrs. Coffin with her six children. Most of Mrs. Coffin's cooking was done at a big old-fashioned fire-place in the cellar. When Mrs. Coffin went out to visit her friends, leaving her little girls alone, she would say to the children, as a great favor, "Now after you have knitted twenty rows on the stockings you are making, you may go down cellar and roast potatoes in the fire-place." The girls thought that was wonderful fun.

As Nantucket lay out in the ocean, the men on the island found their occupation upon the sea. Some threw out their nets within sight of their own houses; some made long voyages to hunt whales; some sailed away to trade with foreign lands. Mrs. Coffin's husband, Captain Coffin, was away from home. He had gone in his own ship to get sealskins along the coast of South America and to exchange them in China for silks, porcelain and tea.

"I wonder when father is coming home," said little Lucretia Coffin to her mother one day. Tears rose to Mrs. Coffin's eyes, and she shook her head sadly. "I fear your father has been lost at sea," she replied. "I have not heard from him for many months." Nine-year-old Lucretia said no more, but resolved to help her troubled mother in every way.

(Abbott's Notable Women in History. John C. Winston Co.)

LUCRETIA MOTT

Though not the oldest of the family, Lucretia was the leader of the children. She was dark-haired and dark-eyed, small for her age, but very active and bright. It was Lucretia who went on the important errands and delivered the important messages to the neighbors. While she owned such a quick temper that her schoolmates sometimes called her "Spitfire," her warm heart

always made up for her hasty words. The older Lucretia grew, the better she controlled herself.

The Joyful Return. Lucretia at School.—As the days passed, and Lucretia reached the age of ten, her loving heart and her active help were more and more needed. Mrs. Coffin grew sadder with each month that went by. But at last, after three years of absence, Captain Coffin opened the door one day and joyfully greeted his family. He had lost his ship, but came home, nevertheless, with a good sum of money. You may be sure that for once even the little ones sat up late to listen to the story of their father's adventures.

Captain Coffin had had enough of the sea. He soon moved to Boston, where he went into business. Lucretia and her sister were at first sent to a private school. Public schools in 1805 were despised by most of the well-to-do people all over the United States. "We will not send our children to associate with the riff-raff," said they. But Captain Coffin was a Friend, and the Friends did not believe in separating the rich from the poor. "My children must mingle with all classes of people," he said, "for that is the way the world goes. They must learn to avoid having a wrong kind of pride." So to public school went Lucretia, and her experiences there were good preparation for her later life.

At thirteen Lucretia and her sister Elizabeth were sent to a Friends' boarding school near Poughkeepsie, New York. Both boys and girls attended the school, but no girl was allowed to speak to a boy unless he hap-

pened to be a near relative, then the two might talk for a little while, on certain days, across the fence which divided the playgrounds.

On one occasion Lucretia broke the strict rules. A boy whom she liked had done something for which he was shut up in a dark closet a whole day, with only bread and water for his fare. Lucretia and Elizabeth stole into the forbidden side of the school where the boys lived, found the dark closet and pushed some bread with plenty of butter under the door. If they had been caught a punishment like the boy's might have been theirs; but luckily they escaped any one's notice. That evening they had a fine story to tell the other girls.

Teacher and Wife.—For two years the Coffin sisters stayed at school without going home. Even when a baby sister came to their family, they did not hear the news for three months. In spite of their separation from home and the strictness of the rules, they enjoyed the school. Lucretia did so well in her studies that when she was fifteen the Friends made her an assistant instructor. In a year more she became a regular teacher.

Among the men teachers at the school was a young fellow of twenty-one, James Mott. James was tall, sandy-haired, and blue-eyed, like Thomas Jefferson. Though of pleasant looks and manners, his disposition was shy and grave. As often happens, serious James became attracted by lively, smiling Lucretia Coffin. Soon they were engaged; both left the school. Mr. Coffin was now managing a factory on French Creek,

where Phoenixville stands to-day,[1] and was living in Philadelphia. So Lucretia went home to her family, and Mr. Coffin took James into his own employ.

In a few months the young couple were married. James was not quite twenty-three and Lucretia had just passed eighteen. As they set up their little home in Philadelphia they were very happy; but trials soon came. Mr. Coffin fell into business difficulties and lost his money. So discouraged were he and James with the prospect that they considered moving to Ohio, which in those days seemed far west. But after having looked over that country, they gave up the idea.

Poverty and Prosperity.—For seven years James and Lucretia struggled along. James Mott tried one business after another, but none brought in a good return. Lucretia taught school in order to help support the home. The future did not look bright. Often Lucretia had to cheer up her husband, who was inclined to look on the darker side of affairs. Their troubles were increased through the death of Mr. Coffin and of their own little boy.

At last came the turn of the tide. James Mott secured a good position as manager of a store and could support his wife and his two children in comfort. During the time of grief and anxiety Lucretia had thought deeply over religious matters, and now that the skies were fairer, she began to speak in Friends' Meeting, Twelfth Street below Market. "What good thoughts

[1] The factory made cut-nails, which were just coming into use. Up to that time, Eli Whitney's way of hammering out nails one by one had been the practice.

Lucretia Mott brought forward to-day," the Friends often had occasion to say to each other. "How well she expressed herself, and how attractive and dignified she looked!" In a year Lucretia became a regular preacher among the Friends. James Mott was very proud of his gifted wife, but for his own part, he usually preferred to sit quiet in meeting.

About this time James Mott entered the commission business as a seller of cotton. It proved a profitable occupation, and he continued it for eight years. Cotton, however, was produced by slave labor, and this idea finally brought up a question of conscience. The country was becoming divided on the matter of slavery. James Mott strongly believed that slavery was wrong. "Is it right, then, to deal in goods that have come from the toil of slaves?" he asked himself. At last he decided to leave the cotton business, even though it was so profitable. He became a seller of wool, and, contrary to his expectations, prospered in this line also.

The Abolitionists.—In the year before Cyrus McCormick invented his reaper, thirty years before the Civil War, a convention was held in Philadelphia for the purpose of forming a national anti-slavery society. Only sixty delegates attended, for the "abolitionists" were few and unpopular. Many persons in the Union wanted to prevent slavery from spreading, but not many were bold enough to try to abolish it.

The convention met in the Adelphi Building, on Fifth Street below Walnut. In the balcony of the hall sat a little group of four leading Quaker women. It was not the custom of those days for women to take

part in such meetings, so these had been invited merely to look on. Lucretia Mott was one of the observers, while James Mott took part in the proceedings on the lower floor.

The four women listened attentively while the members of the convention discussed their "platform."[2] Finally Lucretia was so interested that she could not help speaking. She said but a few sentences, yet John Greenleaf Whittier, who was one of the secretaries, wrote long afterward, "I have never forgotten the charm of her clear, sweet voice." Lucretia ended her remarks by apologizing for intruding her words into the discussion, but the chairman, more broad-minded than most men of his time, thanked her for her wise and valuable suggestions.

Inspired by the convention, Lucretia Mott and her women friends met to form an anti-slavery society of their own. The only women's societies then held in Pennsylvania were those in some church; consequently the Quaker women did not know how to go about the matter of organizing. In despair, at last, they called upon a colored man who was present. He took the chair and started off the proceedings. Once having begun, however, the society kept up its work for thirty-six years, until the Civil War had ended and every slave had been freed. During most of that time Lucretia Mott the Quaker preacher was its president—a steadfast and bold leader.

[2] A "platform" is a declaration of principles. At the time of important elections, each political party draws up its "platform," so called because on this the party takes its stand. The Declaration of Independence was one of our earliest American platforms.

II. TROUBLE AND TRIUMPH

Pennsylvania Hall.—It is hard for us to-day to realize the bitter hatred which the Abolitionists stirred up. Most persons both in the North and the South opposed them. The Southerners said: "These Abolitionists are trying to get the slaves to murder their masters." The Northern men, almost as bitter, said: "Abolitionists will destroy our profitable trade with the South and in the end will break up the Union." But although not one person out of a hundred sympathized with them, the Abolitionists bravely continued to speak and work in favor of destroying slavery. Lucretia Mott, at the head of her Philadelphia Female Anti-Slavery Society, took a leading part.

Often the Philadelphia Abolitionists were refused the use of halls for their meetings. They determined to build one of their own, so they raised a large sum and erected on Sixth Street below Race, a three-story building, which they called Pennsylvania Hall. It contained the finest public hall in the city. On its first floor, below the large meeting room, was the office of John Greenleaf Whittier, who was editing an anti-slavery paper, the *Pennsylvania Freeman*.

When the building was finished the anti-slavery people held exercises there for three days. Many colored persons attended these meetings. Each day crowds of hoodlums loitered about the door and jeered at the Abolitionists. Each night a mob of men assembled and threatened to destroy Pennsylvania Hall. But nothing brought fear to the enemies of slavery.

On the third day, Lucretia Mott attended a woman's meeting in the Hall. William Lloyd Garrison, the most famous of the Abolitionists, was addressing the meeting. Suddenly a shower of stones struck the windows. Down crashed the glass, but the heavy wooden slats of the blinds inside kept the people from being hurt.

THE BURNING OF PENNSYLVANIA HALL

Calmly the women remained until the end of the meeting; but the mob had grown so large and so threatening that the managers of the hall decided to hold no exercises that evening. By Mayor Swift's advice they gave him the keys of the building.

Fire and Riot.—The Mayor, having taken no measures to disperse the mob, departed, leaving it to do what

it pleased. Soon the rioters battered down the doors of the hall with a piece of timber, rushed into the building, piled up books and wooden blinds at the foot of the speaker's desk, turned on the gas, and set fire to the litter. Whittier, disguised in a wig and a long white overcoat, rushed in with the crowd and managed to save some of his valuable papers. If he had been recognized, his life would have paid for his daring. The few policemen present could do nothing to stop the mob. Soon the firemen arrived on the scene. "Don't throw a drop of water on the Hall or we'll cut the hose," cried the crowd. When morning came, only the crumbling, blackened walls of Pennsylvania Hall remained.

Not satisfied with setting the "nest of the Abolitionists" on fire, a crowd turned away from the blazing structure and started off to assault the Mott home on Ninth Street above Race. Many threats of this had been made during the day, and James and Lucretia Mott were prepared for it. According to the peaceful ways of the Friends, they provided no guns nor pistols, but moved some clothing and furniture to the next house, then sat in the parlor waiting.

After a time their son Thomas, who had gone to the corner to watch, came running in, calling out, "They're coming!" Sure enough, James and Lucretia could hear the shouts of the gang as they rushed along Race Street. The cries came nearer, then began to grow faint. What had happened? Later on the Motts discovered that a young man who was friendly to them had pushed to the head of the mob. When Ninth Street was reached, he shouted at the top of his voice, "On to

Mott's!" but led the savage men, who blindly followed him, straight along Race Street.

The Mott home was saved. When the rioters found they had been misled, they were some distance away. They satisfied their rage by setting on fire a nearer building, the Shelter for Colored Orphans, on Thirteenth Street above Callowhill. Fortunately, a man of braver heart than Mayor Swift was on the spot. Magistrate Morton McMichael came to the rescue. Calling to him a band of sturdy firemen and respectable citizens of the neighborhood, he drove off the roughs and saved the Shelter.

Next day the mob still carried on their work of destruction. They ruined a colored church and threatened to wreck the office of the *Public Ledger* at Second and Dock Streets, because that newspaper had favored free discussion about slavery. But now the good citizens of Philadelphia began to feel ashamed that such violence should be allowed. The Mayor sent a large force of policemen to protect the *Ledger* building, and the crowd melted away. But mob or no mob, Lucretia and her friends in the plain bonnets continued their anti-slavery meeting that day. To those who showed fear, Lucretia had one answer, a motto and a principle, "Be steadfast."

Escapes from the Mob.—On another occasion, in New York City, the convention of the Anti-Slavery Society was broken up by a mob. As the speakers left the hall and tried to pass through the crowd they were roughly treated. Lucretia Mott was being escorted by a gentleman. Seeing some of the women shrinking back

in fear, she said to her friend, "Leave me, and take care of these ladies." "But who will take care of you?" questioned her escort. Lucretia laid her hand on the arm of one of the roughest men in the crowd. "This gentleman will see me safely through," she remarked. Touched by her confidence, the burly fellow conducted her through the turmoil.

The next day Lucretia happened to go into a little restaurant near the New York hall. At a table she spied the man who had taken her to safety the afternoon before. Lucretia sat down at the same table and entered into conversation. After awhile the man finished his meal and left the room. At the door he turned to one of Lucretia's friends, asking, "Who is that lady?" "Why, that is Lucretia Mott," came the answer. For a moment the man stood astonished. Could that be the person who was supposed to stir up such trouble? He was wise enough to know when he was wrong. "Well, she is a good sensible woman," he declared.

As the years went on the Abolitionists grew in numbers, though they still remained a small part of the people. What should be done in regard to slavery if it were not abolished, was a perplexing question. Slavery was at the bottom of almost every great national problem. Lucretia and her friends saw in all this discussion and disturbance the signs of a time when there should not be one slave left within the Union.

Still mob violence against the colored people was common. One evening the Mott family was sitting in the parlor, in their house, now being on Arch Street below Twelfth. They heard a confused noise which

from experience they recognized as the roar of a mob. As it drew near, James Mott went to the door, opened it and stood on the threshold. A poor colored man was being chased by the crowd and for refuge was coming to the well-known home of the Motts. James Mott stood one side to let him in. The negro dashed through the house and out again at the back gate, so throwing his pursuers off the track. As tall, white-haired Mr. Mott fronted the disappointed crowd, some one hurled a brick at his head. Luckily it missed him by a few inches, but its deep dent remained in the door-frame as a witness to his narrow escape.

"Roadside." The Fugitive Slave.—By the time Lucretia Mott was sixty-three it was necessary for her to take more rest. Her health failed under the strain of presiding at public meetings, of attending committees, of speaking on this occasion and on that, of entertaining strangers. So widely was she known in Philadelphia that there were constant calls on her time. James Mott therefore decided to sell his city home and buy a house in the country. The couple settled in a small house along the Old York Road, a few miles outside of Philadelphia.

At "Roadside," as they called the new home, life went on peacefully, yet actively. James and Lucretia Mott lost none of their interest in public affairs. One or another of their married daughters always lived with them and took care of household matters. It was a common sight on the Old York Road to view the well-known couple driving along in their little carriage, on the way to or from some meeting in the city or country.

The troubles about slavery had increased, and many

Southerners were trying hard to recapture the slaves who had run away from them to the North. One of these slaves was arrested near Harrisburg, and was brought handcuffed to Philadelphia for trial. The Abolitionists determined that if they could prevent it he should not be dragged back to slavery. It was a son-in-law of Lucretia Mott who was the lawyer for the prisoner. In the court-room at Fifth and Chestnut Streets, near the prisoner, sat Lucretia. One of the lawyers for the slaveholder said, "Please make Mrs. Mott move her chair. I am afraid the sight of her face will turn the jury against my case." The lawyer's fears were the best compliments she could have received. In the end the slave was set free.

Victory for Freedom's Cause.—In April, 1861, James and Lucretia Mott celebrated their "golden wedding." As on that sunny day of spring their children, grandchildren, and even one tiny great-grandchild, came to do them honor, no one thought that two days later the Southern cannon would be firing on Fort Sumter and the Civil War would have begun—all on account of slavery. Being a Friend, Lucretia did not approve of war. But when the United States Government called upon the negroes to be soldiers, she saw that this was a step toward making the negro a true citizen of the nation.

Camp William Penn, for training colored soldiers, was established near "Roadside." Many colored visitors came out on the train to see the new soldiers. The Fifth and Sixth Streets horse-car company, whose cars ran to the railroad station in Philadelphia, carried a number of colored people, but these were allowed to

have seats in only one car out of every five. If they boarded any of the other cars, they had to stand on the platform. One stormy day Lucretia Mott was riding on this line. A colored woman, neatly dressed, but looking frail and weak, stepped aboard. She stood out in the cold, and the rain blew upon her.

"Please let that woman come inside," Lucretia begged of the conductor. He shook his head. "The company's orders must be obeyed," he answered. Out to the platform walked Mrs. Mott and took her stand beside the colored woman. The other passengers, most of whom knew Lucretia Mott very well, began to say, "This will never do." Out came the conductor in his turn and begged Lucretia to come in. "I cannot come without this woman," quietly replied Mrs. Mott. "Oh, very well, bring her in, then!" growled the defeated officer. Calmness and persistence for the right had won the day.

After four years of bitter fighting came the triumph of the North. Now the freedom of the slaves was made sure. The anti-slavery societies broke up, for their work was finished. How joyful James and Lucretia Mott felt, to see the dearest wish of their hearts fulfilled after nearly forty years! They still found much to do, however, in helping the poor colored people of the North, but in a few more years James Mott's life had ended.

Though lonely beyond words, Lucretia lived twelve years longer. Ever kind and thoughtful for others, she was loved and admired everywhere she went. People never forgot that she had defended the rights of the slaves when there were few to speak for them.

The hatred of the old days had disappeared. Strangers stopped Lucretia in the street, asking to shake her hand. Many children, colored and white, were named for her. She had done a great work, and in this life she received part of her reward.

At the age of eighty-seven, Lucretia's strength failed. "I feel that it is best for me to go," she said, and soon passed away. Her name will always be honored as that of a strong leader for truth and justice. How James and Lucretia Mott would delight in seeing great institutions such as we have to-day for the betterment of the negro—Tuskegee Institute in Alabama and Hampton Institute in Virginia! Many smaller institutions, of which the Friends support a number, are doing similar work, and are carrying out the idea of Lucretia Mott that it is the colored people's right to be good American citizens.

FOR DISCUSSION AND LIBRARY WORK

1. Why did it take so long for news of another baby sister in the Coffin family to reach Lucretia's school?
2. Could your sister become a teacher at as early an age as did Lucretia Mott?
3. Recite some anti-slavery lines written by Whittier or Longfellow.
4. Why did some persons who disliked slavery object to having it abolished?
5. Why did not the women of 1830 take part in public affairs?
6. Find some additional stories of the rough treatment which abolitionists often received in those days.
7. How did the street-car on whose platform Lucretia Mott rode differ from the street-car in which you rode last week?
8. Find out all you can about the wonderful work which Tuskegee and Hampton Institute are doing for the colored race.
9. Find the name of the society or institution nearest to you which is helping the negro to help himself.

HARRIET BEECHER STOWE
1811–1896

THE WOMAN WHOSE STORY STIRRED THE NATION

"If any one of you has doubt about this world, just remember what God has done; just remember that this great sorrow of slavery has gone, has gone forever.—*Speech to her friends on her seventieth birthday.*

I. THE HOUSEWIFE AUTHOR

Work and Play in a Big Family.—In the western part of Connecticut lie the beautiful Berkshire Hills. Among them, at the time of the War of 1812, lived a minister, Lyman Beecher. Mr. Beecher's salary was small, but his family was large. He had eight children, six boys and two girls. The younger of the girls was named Harriet, a blue-eyed, active child, with long, fair curls.

Harriet's home was a big white house set in a hollow between two of the hills. Prospect Hill, so called because people walked up there in the evening to see the sunset, was on the west, and Chestnut Hill, thickly wooded, loomed up on the east. There was room enough at the side of the house for a garden, and behind the house was a barn for old Dobbin and his hay and oats, as well as a large woodshed and a chicken-house. It was almost as good for Harriet as living on a farm.

In this Litchfield home Harriet had a happy time with her merry sister and her six noisy brothers. Mrs. Beecher was as lovely and kind a mother as any girl could wish. Mr Beecher, beside his duties as a min-

ister, had many odd jobs that needed to be done about the house and barn, but he was never too busy for a bit of fun. The Beecher youngsters were taught to work, but work was a pleasure to them.

The "old windy castle of a house" in which the Beechers lived needed an immense amount of wood to

(Abbott's Notable Women in History. John C. Winston Co.)

HARRIET BEECHER STOWE

keep it comfortable. Each winter the farmers who belonged to Mr. Beecher's church brought on ox-sleds enough wood to last him for a year and piled it up in the yard, on Mr. Beecher's garden-plot. Before he could prepare his garden in the spring, all this wood had to be cleared away.

Each spring, therefore, the Beechers had a grand wood-party. The father and his boys cut this cord-

wood into proper lengths and split those chunks into pieces. For many days they worked, and when that job was done, came the wheeling of the wood into the shed and the piling of it in an orderly way.

"If Harriet were a boy," Mr. Beecher liked to say, "she would do more than any of you." Then, of course, Harriet wanted to show what she could do. She put on a short black coat so as to look more like a boy, and worked as busily as her brothers. When all was finished, even every chip swept up, her father would harness the horse to the cart and take his flock of children on a fishing excursion to Little Pond. They pushed out on the lake in a boat, which they named "The Yellow Perch," and caught good strings of fish, not only perch, but sunfish, catfish, and pickerel, too. At night, when they returned home tired but happy, Mr. Beecher himself would fry the fish and there would be a fine supper. Oh, how good those nice fresh fish tasted!

Amusement for Every Season.—In later spring and in summer Harriet loved to wander along the tangled, rocky banks of the clear Bantam River which flowed near her home. When tired of picking bouquets of the flowers which abounded in the woods bordering the stream, she often went to rest on Solitary Rock, a great flat piece of granite jutting out into the gurgling water. There she dreamed away many a pleasant idle hour.

And then, too, in the fall, what fun it was when Mr. Beecher took his children on nutting expeditions! Every good-sized basket in the house was pressed into service. After the noisy troop had departed, Mrs. Beecher usually had to go about the rooms picking up

many a pile of things that the eager children had simply dumped out of the baskets upon the floor. In that golden October weather, how delightful for Mr. Beecher and his older boys to climb into the tall trees to shake down the chestnuts and walnuts, while Harriet and her younger brothers searched for the nuts among the heaps of dry leaves!

As winter came on, apples and quinces had to be made into sauce and preserves, and Harriet liked to help. In the cheerful kitchen, the family sat around a big table to cut and peel the fruit. A bright fire blazed and snapped in the deep fire-place, where hung a big brass kettle for the stewing. As all hands busily worked, Mr. Beecher kept them entertained by telling exciting incidents from Walter Scott's novels, which he had brought from Boston as the latest thing out.

The long winter evenings also witnessed some fine concerts. In New Haven Mr. Beecher managed to buy a piano, which was a thing not many country houses then contained. While Mrs. Beecher played, her husband accompanied her with his violin, and Edward and William joined in with their flutes. One of the greatest enjoyments of Harriet's life was to listen to the family orchestra.

The only unhappy person in the Beecher home was Aunt Mary, who came to live there for a time. She had married a planter in the West Indies; but on her husband's plantation she saw so much cruel treatment of the slaves that she could not bear to stay. With broken-down health she came back to the United States. Aunt Mary described to Harriet the whippings and

other punishments which the slaves received, and told how ignorant and animal-like a life the planters allowed the slaves to lead. "Often," she said, "I sat at my window in the tropical night and wished that the island, with all its sin and misery, might sink in the sea." Harriet learned bitterly to hate slavery, which caused such wretchedness.

The New Home in Cincinnati.—Harriet was such a bright child, and such a great reader and student, that when she was twelve, she had finished the studies of the Litchfield Academy. Now in order to carry on her education it was necessary for her to leave her pleasant home and go to Hartford, where her older sister Catherine had established a seminary for girls. There, studying and teaching, Harriet spent much of her time for the next eight years. Meanwhile Mr. Beecher had moved to Boston and had become famous as a great preacher and a successful leader.

When Harriet was twenty years old, Mr. Beecher was invited to go West to become the president of Lane Theological Seminary, where students were educated to be ministers. The seminary had just been built at Walnut Hills, two miles from Cincinnati. The journey from New England to the West seemed a great undertaking, but Mr. and Mrs. Beecher decided to go. With them went six of their family, among whom were Catherine and Harriet.

There were no railroad trains to carry the Beechers swiftly over the country. They went by stage-coach across Pennsylvania, from Philadelphia, by way of Harrisburg, and then to Wheeling, on the Ohio. They found

their new home in Cincinnati very pleasant. It was then often called "the Capital of the West." Catherine opened a school, and Harriet was her chief assistant. In company with one of the other teachers of the school, Harriet one day crossed the river to Kentucky and made a visit to a plantation on which many slaves were kept. This was Harriet's first experience of slavery, and years later she wove what she had seen and heard into a wonderful story.

Harriet Begins to Write. Her Marriage.—Harriet at this time was far from strong. For a number of years she had been studying and teaching too much. "I have everything but good health," she wrote to one of her friends. "Thought has been my disease." But when Harriet and Catherine joined a literary society, in which were the most intelligent people of Cincinnati, Harriet found her greatest enjoyment in writing to express her thoughts. Judge Hall, one of the members of the society, was editor of the *Western Magazine.* He offered a prize of fifty dollars for the best short story. Harriet sent in a story which easily took the prize. Now she felt that she had found her chosen occupation.

Among those who belonged to the literary society were Professor Calvin Stowe and his wife. Professor Stowe was a brilliant scholar with a marvellous knowledge of foreign languages, and was one of the leading men in the faculty of Lane Seminary. Mrs. Stowe was a lovely young woman, about the age of Harriet Beecher, who became one of her great friends. When Harriet was twenty-three, Mrs. Stowe died. Her hus-

band was so lonely and sorrowful that Harriet felt pity for him. She tried to cheer him up and to induce him to go out into company. While she tried thus to befriend Professor Stowe, he in turn grew to love her dearly. At the end of two years they were married. Harriet was twenty-five years old, and her husband nine years her senior.

Professor Stowe had always taken a great interest in improving the public schools. About this time the legislature of Ohio selected him as the right man to go abroad and make a report on the best things which he could note in the elementary schools of Europe. This was a great honor, but Professor Stowe could not take his wife and did not wish to go without her. Finally Harriet persuaded him that he ought to go. It was more than half a year before he returned. During this time Harriet lived in Cincinnati with her father. In these leisure hours she wrote a number of short stories and essays for papers and magazines. When Professor Stowe returned, he found himself the father of little twin daughters.

The Stowe family now went to housekeeping, but it was a very plain establishment. Harriet herself said, "My husband was rich in Greek and Hebrew, Latin and Arabic, and alas, rich in nothing else. My entire stock of china for parlor and kitchen was bought for eleven dollars, and that lasted very well for two years." More babies arrived, as the years passed, and Harriet, though she loved her children dearly, found it hard to get along in sickness and poverty.

Some of Harriet's friends, in order to help her,

secretly sent to some magazines stories she had written. Harriet was greatly surprised when letters arrived containing money from the pleased publishers. Her first earnings went to buy a feather-bed and pillows. After that, when a new carpet or mattress was needed, or Professor Stowe began to wonder how he would ever pay his bills, Harriet would say to her faithful maid, "Now, Anna, if you will keep the babies and attend to all the things in the house for one day, I'll write a piece, and then we shall be out of the scrape." Professor Stowe said to her, "My dear, you must be a literary woman. It is so written in the book of fate."

But the book of fate had many other things written down for Harriet to do. When she was not sick, her husband was ill. They could save no money, and when hard times came to Cincinnati, Professor Stowe's salary, small at best, was cut down. There seemed to be nothing but trouble in store. At last, in 1850, Professor Stowe was invited to take a position in Bowdoin College, Brunswick, Maine. Harriet Stowe went ahead of him to Brunswick with three of her children to get a house ready. She went by steamer to Pittsburgh, then by canal-boat over the inclined planes across the Pennsylvania mountains. On the eastern side of the mountains she changed to the railroad cars for the rest of her journey.

The Brunswick home gave Mrs. Stowe, now almost forty years old, plenty to do. Professor Stowe was one of the old-time scholars, who buried himself in books more and more as years went on, and left the troubles of the household mostly to his wife. Though Mrs. Stowe

loved and admired her book-worm husband with the same deep feeling he had for her, she often thought that the strain of managing everything would bring her before long to the grave. Yet the amount of work she performed was amazing. She took good care of her brood of six, helping the older children with their lessons though she had a baby to attend upon, yet she managed to continue writing stories and sketches. Sometimes Mrs. Stowe dashed off page after page while sitting in the kitchen, directing the maid, with her little ones about her. How many other women could have summoned up the energy to do so much?

II. THE WAR-BOOK

The Fugitive Slave Law.—On her way to the new home in Brunswick, Mrs. Stowe stopped to visit her brother, Edward Beecher, who had become a minister in Boston. Edward and his wife were greatly excited over the "fugitive slave"[1] question which Congress was then discussing. So many slaves ran away to the free states, that the slave-owners wanted a law which should make it easier for them to get these negroes back. The Fugitive Slave Law as it was planned gave the slave-holders power to search out their runaway slaves and to make the United States officers in free states help in this task.

Mrs. Stowe had seen and heard enough of slavery while she lived in Cincinnati to make her hate it even more than in her childhood. Although most of the slaves in Kentucky and Virginia were kindly treated by their masters, the negroes farther South often suffered

[1] Fugitive means a person who runs away.

great cruelty. Any slave might be sold without warning from a kind owner to one who was savage. In her own house Mrs. Stowe had had a young colored woman with a little boy. They had run away from slavery. One day the woman came to Mrs. Stowe in deep distress. "My old master is in the city looking for me," said she. "Don't let him get me!" That night, although it was dark and stormy, Professor Stowe took the woman and child in a carriage over the muddy roads to a lonely farm-house which was one of the stations of the "Underground Railroad,"[2] and left her in safety.

Before the Stowe family were fairly settled in Brunswick, the Fugitive Slave Act was passed by Congress. Now the people of the North saw United States officers capture runaway negroes and take them handcuffed through the streets on their way back to their Southern masters. The slave-hunters searched through Boston. Many pitiful stories were told of families that were broken up by the capture of the father, of flights to Canada in the dead of winter, of grief and suffering in every way through the new law.

A Vision of "Uncle Tom."—Mrs. Edward Beecher wrote from Boston to Mrs. Stowe, "Hattie, if I could use a pen as you can, I would write something that would make the whole nation feel what an accursed thing slavery is!" When the letter came to Brunswick,

[2] The abolitionists helped many slaves to escape to parts of the North which were far removed from the slave states. These slaves were taken at night in wagons from one house to another, and were hidden in the day-time, until they were safe from being captured. This way of transferring the slaves was termed "sending them by Underground Railroad" and the various houses which forwarded and concealed the slaves were called "stations."

Mrs. Stowe read it aloud to the family that evening, as they sat in their little parlor. As she came to the great wish that her sister-in-law had made, Mrs. Stowe could not restrain herself. Rising from her chair, with the letter crushed in her hand, she exclaimed, "God helping me, I will write something. I will if I live."

PROFESSOR STOWE LEADING FUGITIVE SLAVE WOMAN AND HER CHILD TO UNDERGROUND RAILROAD STATION

For some time Mrs. Stowe's intention could not be carried out. She had another baby, her seventh, to care for; her house and family needed much attention; and when weary with work she had to write on other subjects in order to make both ends meet. But in the beginning of the next year, 1851, she was sitting one Sunday with her children in the Brunswick church. Suddenly

a moving picture of slaves seemed to pass before her eyes. So strongly did it move her that she could scarcely keep from bursting into tears.

That afternoon Mrs. Stowe went to her room, locked the door, and wrote out a chapter called "The Death of Uncle Tom." It seemed to her as though some power beyond herself supplied the thought. "Ideas," she said, "were blown through my mind as if by the rushing of a mighty wind." When ordinary paper failed, she seized some brown wrapping paper in which groceries had come, and on this finished the chaper.

In the evening, gathering her children around her, Mrs. Stowe read to them what she had written. Her two oldest boys, one ten and one twelve, began to cry. One sobbed out, "Oh, mamma, slavery is the most cruel thing in the world!" But Mrs. Stowe did not know what a powerful sketch she had composed. Busy with her household cares, she laid aside the story and forgot it. Professor Stowe was away at the time on a lecture trip. Some time after he returned he discovered the pieces of white and brown paper, read the story, and, like his boys, began to weep. That did not mean much to Mrs. Stowe, however, for he often cried over the sad portions of her stories; but when he earnestly said, "My dear, you must write a serial story and make it end with the death of Uncle Tom," Harriet replied, "I will."

"Uncle Tom's Cabin."—Many stories and sketches by Mrs. Stowe had already been taken by the *National Era,* an Abolition paper published in Washington. To the editor of the *Era* she now wrote, "Do you wish a

serial story called 'Uncle Tom's Cabin, or Life Among the Lowly?'" "Yes," answered the editor; and Mrs. Stowe began her novel.

"Uncle Tom's Cabin" was not written as is the ordinary story; it came from the bottom of the author's heart. Many a night while the serial was in progress Mrs. Stowe looked tenderly at her own little baby Charlie as he lay sleeping beside her, and then wept as she thought of the slave mothers whose babies were taken from them. "My heart," she wrote, "was bursting with pain at the cruelty and injustice our nation was showing to the slaves, and I prayed God to let me do a little, and to cause my cry for them to be heard."

As Mrs. Stowe thought and wrote, the story grew in length and strength. It was supposed to run for three months in the weekly *Era*. Instead of that, it continued for nearly a year. Every one who read it while it was appearing felt its power. A Boston publisher offered to bring it out as a book. "But," said he, "you are making the story too long." "I didn't make the story," answered Mrs. Stowe. "It made itself, and I can't stop until it is done."

A Great Book Appears.—Though Mr. Jewett, the publisher, took the story in spite of its length, "There is a risk in this," he stated. "It is not a pleasant subject, and we cannot expect any book written by a woman to have a very large sale." Professor Stowe took the first copy of the book to the railroad station in Boston and gave it to a special friend who was just leaving for Washington. This friend, Mr. Philip Greeley, was a

grave man who disliked to show any feeling. Soon after the train pulled out of Boston he began to read. As he grew interested in the story he found himself crying. Mr. Greeley was disgusted with himself, for he had never done such a thing before. He wanted to go on with the book, but he found that the tears kept coming to his eyes, and he feared the other passengers would see his feeling. Finally, he decided to leave the train at Springfield. There he went to a hotel, and sat up long after midnight until he finished the absorbing book.

No other American book had ever taken the fancy of the Northern people so quickly as did "Uncle Tom's Cabin." One rainy day James Mott drew his big armchair to the window of his Arch Street house in Philadelphia and began to read this new book. The afternoon passed away and he kept on reading. His daughter lighted the gas earlier than usual so that he should not be compelled to stop, and he seemed unwilling to lay down the volume when the supper bell rang. After supper Mr. Mott hastened back to his chair and "Uncle Tom." When the rest of the family went to bed he was still lost in the story. At breakfast next day all inquired what time he retired; but James Mott never would tell. "Uncle Tom's Cabin" was the only novel with which Lucretia Mott had any patience; wonderful to relate, she occasionally would listen to a chapter.

Novels were not many in those days, and this one, whose subject was of nation-wide interest, swept through the North. Mr. Jewett had well advertised the book, and three thousand copies were sold on the first day it appeared. In a few days more the number

reached ten thousand. Within a year it was over three hundred thousand. Harriet Beecher Stowe had wondered, "Will anybody read my book or listen to my call to pity the slave?" This was the answer.

Fame and Honor.—In her book Mrs. Stowe tried to be more than fair to the South. She showed that there were kind and generous masters as well as cruel ones. The trouble lay in slavery itself, which gave one man complete power to do with another as he pleased. That power even a good man ought not to have. Mrs. Stowe thought the Abolitionists would not be satisfied with her story, but that most of the Southern people would say, "This woman has written fairly and honestly."

To the author's surprise, the Abolitionists thought "Uncle Tom's Cabin" a wonderful book. They could not praise it enough. But the Southern people could not see the good things she had said about the slaveholders; they felt only the fact that this powerful book had pronounced slavery to be absolutely wrong. In many cities of the South it was not allowed to be sold in the book-stores. One of Mrs. Stowe's cousins who lived in Georgia did not dare to address her letters to the Northern author. It was necessary to send every such letter in an envelope directed to another person.

The whole story as it appeared in the *Era* magazine had brought to Mrs. Stowe only three hundred dollars. As her profit in the first three months after it appeared as a book, the publisher sent her a check for ten thousand. Without Mrs. Stowe's consent, "Uncle Tom's Cabin" was presented on the stage, and millions flocked to see the play. The people of the North went wild

over the book. They laughed at Topsy; they held their breath as Eliza, with little Harry in her arms, crossed the Ohio on the floating ice; they grieved over the death of Eva and of Uncle Tom; and they ended by feeling more strongly than ever that slavery was wrong. This quiet little woman of forty-three with her interesting story had done more than many great speakers had been able to accomplish.

Across the ocean, in England, France, Germany, Italy, "Uncle Tom's Cabin" immediately became popular. Within a year after the book came out, its author was famous on both sides of the Atlantic. Many important persons wrote inviting her to visit England. Every slave on English ground had been set free nearly twenty years before. Harriet accepted the invitation, hoping that she could still further stir up England to persuade our Government to follow its good example.

This was the first of three pleasant visits to Europe by Professor Stowe and his famous wife during the ten years that followed. On each of these visits Mrs. Stowe was honored, praised and entertained in a way that would have turned the heads of most persons; but no amount of attention could make her proud. "Isn't it funny," she said, "to see poor little me with all the great ones of the earth?" "Abolition," one of the Southern statesmen remarked, "is becoming fashionable." Mrs. Stowe wrote another anti-slavery story, "Dred: A Tale of the Dismal Swamp." "Dred" is not read to-day as is "Uncle Tom's Cabin," but it excited great interest at that time. Queen Victoria began to

read the book the minute it arrived and preferred it to "Uncle Tom."

By War to Freedom. The Sunset of Life.—"Uncle Tom's Cabin" had fanned the fire of trouble which slavery had kindled. The fire burned higher and higher as the years went on, and at last burst into the Civil War. Mrs. Stowe's oldest living son was one of the first to volunteer on the Union side. "I should be ashamed to look my fellow-men in the face if I did not enlist," said he. "People shall never say that Harriet Beecher Stowe's son is a coward."

While her son was fighting in the army, Mrs. Stowe was following with the utmost interest the question of the freedom of the slaves. President Lincoln had stated his intention to declare the slaves in the Confederate States free unless those states by a certain time ceased fighting against the Union forces. Mrs. Stowe wished to be sure that Lincoln meant what he said. She made a special trip to Washington to see him. As soon as Lincoln heard her name he jumped up from his chair and grasped her hand. "Why, Mrs. Stowe," he exclaimed, "I'm right glad to see you! So you're the little woman that wrote the book that made this great war!" That was partly a joke; but it was true that "Uncle Tom's Cabin" had widened the division between the North and the South. Giant Lincoln and tiny Mrs. Stowe passed an hour in close conversation, and Mrs. Stowe came away with the conviction that Lincoln was a man of his word.

The war ended; all the slaves were freed. That brought gladness to Mrs. Stowe's heart. But sorrow

was there, too. Her son had been brought home from the field of Gettysburg, desperately wounded. To help him recover, if possible, Mrs. Stowe bought for him first a cotton plantation, which proved a failure, then an orange grove in Florida. There Professor Stowe and she spent their winters among flowers and sunshine, on the banks of the St. John's River. Nothing, however, improved the health of her wounded son, who at last, very ill, sailed away to San Francisco and was never heard of again. But in Florida, that "strange, sandy dreamland," Mrs. Stowe and her husband found some forgetfulness of their grief. They helped the colored people around them and took great pleasure in seeing them grow more prosperous each year.

Many books came from Mrs. Stowe's active pen during these Florida winters and Connecticut summers. Editors and publishers were always anxious to have something new from the famous author. Yet she took time to enjoy the world and to entertain her friends. With all the money which she earned she never grew rich. There was always some good cause which swallowed up her income. When she was seventy-five her husband, whom she loved so fondly, was taken away. For ten years longer Harriet Beecher Stowe lived on, but wrote no more. "My sun has set," she said. "The time of work for me is over." She had indeed done her work, a great work, in rousing the North and in making it plain that slavery had to perish. We honor her as a powerful writer and great leader, but still more as a noble American woman.

FOR DISCUSSION AND LIBRARY WORK

1. Find out all you can about the life of Harriet Beecher's older sister Catherine and Harriet's younger brother Henry Ward.
2. Trace the route by which the Beecher family went from New England to Ohio.
3. If Harriet Beecher had lived in Pennsylvania, what line would she have had to cross to reach slave-country? Why was that line so called?
4. What poet, loved by every child, was a graduate of Bowdoin College? What can you find out about his life there?
5. Contrast Harriet Beecher's trip from New England to Cincinnati with Harriet Beecher Stowe's trip from Cincinnati to New England.
6. Find all the stories you can about slaves escaping by the Underground Railroad.
7. Name three more books written by Harriet Beecher Stowe .
8. Which did more to help the slaves, Harriet Beecher Stowe or Lucretia Mott?

ABRAHAM LINCOLN
1809–1865

THE PRESERVER OF THE NATION

"With malice toward none, with charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in."—*Address at his second inauguration.*

I. PINCHING TIMES

The Poor Backwoods Boy.—Three days before Cyrus McCormick was born in Virginia, another country boy began to draw the breath of life in Kentucky. Cyrus opened his eyes in a big, pleasant brick house, Abraham Lincoln in a poor little log cabin. Yet in this land of democracy both became famous. Every intelligent American knew what Cyrus McCormick had accomplished; but every man, woman, and school-child in the United States not only knew "Abe" Lincoln's story but also was familiar with his face. How did this come about?

ABRAHAM LINCOLN

Abraham's father, Thomas Lincoln, was certainly not born to succeed. He was honest, it is true, but very easy-going. Among the hills near the Ohio River, not far from Louisville, he lived in his rough cabin and tilled his little farm. Kentucky was yet a new state; it had not been many years since Daniel Boone and his pioneers fought with the Indians and settled the land.

Thomas Lincoln's father had been one of these pioneers, and had been killed by the Indians while he was chopping down the forest. The Lincoln farm was still in the backwoods of Kentucky, away from the fertile and prosperous "Blue-grass Country."

As a real backwoods youngster, satisfied with plain living and used to hard work, "Abe" grew up. Thomas

BIRTHPLACE OF ABRAHAM LINCOLN, HARDIN COUNTY, KENTUCKY; NOW THE SITE OF A GREAT MEMORIAL BUILDING

Lincoln, who could neither read nor write, would have been willing for his son to know nothing beyond the labor of the farm; but Abraham's mother wanted her boy to have an education. Often she called little Abe and his sister Sarah to her, and told them stories of great men and great events, remembered from her reading. Late in his life Lincoln said, with tears in his eyes, "All that I am, or hope to be, I owe to my angel mother."

A New Home.—Thomas Lincoln's farm lay in a small valley surrounded by steep hills. One May day Mr. Lincoln sent Abe out to plant pumpkin seeds in the field where corn was also being planted. All day Abe and his father worked, and in the evening the task was done. The very next morning there was a big rain. Floods of water poured down from the hills and washed soil, corn and pumpkin seeds all together into Knob Creek. Perhaps this unexpected misfortune discouraged Thomas Lincoln with that location; at any rate, not long after, he decided to leave Kentucky and settle in the southern part of Indiana.

Accordingly, Mr. Lincoln loaded his few household goods into a wagon, and with his wife and his two children started off for the new home-spot. It was a toilsome journey. They were rowed across the Ohio River on a ferry-boat scow; then they continued their travels. Part of the time they rode through woods so thick that Thomas Lincoln had to cut a way for the team. Finally they arrived safe at their goal.

Although Abe was but seven years old, he had grown tall and strong for his years. Mr. Lincoln therefore put into Abe's hands a small axe, and made him help in clearing the land on the new farm. When his father had chopped down a tree, Abe's part was to cut off the small branches. Soon a space had been cleared for a good-sized corn-field.

When the corn had been planted, it was necessary for Mr. Lincoln to go about building a house, for his wife was tired of living in the cramped space of the covered wagon. As time was precious, however,

Thomas Lincoln made only what was called "a half-face camp," that is, a shed with one side open. To keep out the worst of the rain or snow, Mrs. Lincoln sometimes hung deerhides over the opening. It was a miserable place to call home, but the family lived in it for a year.

The Log-Cabin Family.—Before another winter came, Thomas Lincoln built a regular log cabin; but though he was a carpenter by trade, the one-roomed cabin for a long time had no floor save the ground. The tables and chairs were made by boring holes in slabs of wood and fitting into these holes sticks of wood for legs. There was no bedstead for any one of the family, only a bed-frame made of poles. Abe slept in the loft above the main room, on a pile of dry leaves. When he wanted to go to bed he did not climb the stairs, for there were none. A row of pegs driven into the wall made a sort of ladder which led up to the trap-door of the loft. Many a winter night Abe must have shivered on his pile of leaves and wrapped his buffalo-robe closer about him as the icy wind blew through the cracks between the logs.

The family in the log-cabin, however, usually had enough to eat. There was game in the woods. Thomas Lincoln sometimes shot or bought from his neighbors deer, bear, wild turkeys, or squirrels. Wild ducks abounded on the streams and fish were easy to catch. At certain times of the year wild pigeons in millions filled the sky. Their daily bread the Lincolns baked from corn-meal. Wheat was so scarce that only on Sundays did they get anything made from flour. In

summer they had berries and wild fruits to add to their bill of fare, and some of these were dried for winter use.

The only vegetables usually raised were potatoes. Sometimes there came days when no meat could be secured and the corn-meal ran low. On one such day there was nothing on the table but a bowl of potatoes roasted in their jackets. Thomas Lincoln asked a blessing on the dinner with as much reverence as though it had been a feast, but Abe remarked, "These are mighty poor blessings, I think." Another evening, neighbors called, and Mrs. Lincoln, who had nothing else to serve, passed around, instead of apples, raw potatoes, pared ready to be eaten. Would you have cared for such refreshments?

Mrs. Lincoln had many duties which housewives today never perform. She made the soap and molded the candles that her family used. With her wheel she spun wool into thread and on her loom she wove the thread into cloth. She tanned deerskin to make breeches for Abe. In short, she was expert at many different trades which are now carried on in factories. But her hard work and the rough pioneer life exhausted her strength. A year after the Indiana cabin had been built, her husband and her children stood by the grave of the good wife and mother, Nancy Lincoln. Even while she lived, it had been a "pinching time," as Abraham said, in the cabin; but now matters went still worse.

Without the mother to brighten and care for it, the home was forlorn. At last Thomas Lincoln went back to Kentucky and returned with a new mother for

the children. The second Mrs. Lincoln proved to be a noble woman. Thomas Lincoln could not have chosen better. Sally Lincoln had brought with her a wagon-load of furniture, and she made the cabin look like a different place. Abraham loved her dearly. Once, after he had become great, he said, "I owe much to my mother." "Which mother?" asked some one. "Don't ask me that question," replied Lincoln. "It has been 'mother' all my life except for that short desolate time after mother died and before mother came. Both were 'mother' to me."

Abe's Education.—When Sally Lincoln came riding back to the log cabin as its mistress, Abe was ten years old, and a great help to his father. As he grew up, Abe learned to plow, to cut grain with a sickle, and to thresh it with a flail. His father taught him to work as a carpenter, and Abe had a hand in building many a house in the neighborhood. Tall, strong Abe was often hired out by his father to work on farms, but his pay of twenty-five cents a day all went into Thomas Lincoln's pocket.

Abe, however, was good with his head as well as with his hands. He had a strong taste for reading and study. In that backwoods country there were no regular school-houses. Occasionally a young man wandered into the neighborhood and announced that he was ready to teach school. The children who chanced to come to him were taught for a few weeks or months in any convenient log-cabin. When the teacher or the children grew tired of the school, the teacher moved on. Abe went to school as much as his father would permit. Thomas Lincoln himself thought that education made

people lazy; but his wife Sally persuaded him to let Abe study in the evenings by the light of the blazing fire.

All the schooling that Abe ever received in his life amounted to less than a year, but what good use he made of his time! Abe picked up reading with wonderful ease. By much practice with his quill he became the best penman in the neighborhood. The younger children in the school often asked him to "set copies" for them. One "copy" that he liked to write was:

"Good boys who to their books apply
Will all be great men by and by."

Almost every week some neighbor would knock at the door, saying, "Abe, won't you write a letter for me?" Abe was always willing. In spelling Abe stood very high. The young people then often amused themselves by having spelling-matches, but Abe usually was ruled out of these. The side that gained first choice always chose Abe Lincoln, and every one knew that he could "spell down" all the others. Abe loved to read. He managed in some way to get hold of every one of the few books for fifty miles around. They were almost all good and useful. Among them were "Pilgrim's Progress," "Esop's Fables," "The Arabian Nights," "Robinson Crusoe," "The Life of Benjamin Franklin," "The Life of Washington," and the Bible.

Abraham had borrowed the "Life of Washington" from Mr. Crawford, a neighbor. In the night a rainstorm came up; it beat through the cracks of the cabin

loft and soaked the pages of the precious book. Abe was deeply troubled, but he did the only thing possible to set matters right. He carried the damaged volume back to its owner and offered to pay for the hurt. "The book is worth seventy-five cents," said Mr. Crawford, "but if you will work two days in my corn-field, we will call it square." Abe did so, and gave the man the best two days of work he ever had. This was the same steadfast honesty that Washington showed. In fact, Washington became Lincoln's hero, the great man who set for his boyish mind a pattern of life.

II. HANDS AND HEAD

Abe, the Giant.—By the time Abraham had become a young man, he was a noted person in the Pigeon Creek settlement. Lincoln's appearance alone would have made strangers turn to gaze at him. This giant of nearly six feet four inches, would have much overtopped even George Washington's imposing height, yet he had none of Washington's erect bearing or fine appearance. Lean and lank, with slightly stooping shoulders and enormous hands and feet, he was both homely and awkward. As Lincoln went about the neighborhood, without coat or collar, his trousers stuffed into the tops of his muddy cowhide boots, there was nothing in his looks to mark any future greatness.

The pioneer people of Indiana, however, valued a man's strength, not his looks, and Lincoln's strength matched his size. He could strike a heavier blow with the maul used in splitting rails, and could sink an axe deeper into a tree, than could any other man in that part

of the country. The axe was Lincoln's favorite tool. From the time he was seven until he was twenty-two, it was seldom far from his hand. All through the rest of his life he loved to grasp it. His usual trick of strength was to take a heavy axe by the extreme end of the handle, stretch out his arm horizontally at full length, and thus hold the axe parallel with the ground. Few men could imitate this exhibition of power.

Lazy or Clever?—As Abe Lincoln could beat every one thereabout in chopping and wrestling, so no one could "hold a candle" to him in cleverness. In fact, he preferred to read, to write or to talk, rather than to work. "He was no hand to pitch into his work as if killing snakes," said one who knew him. Though when he did undertake any manual labor he did it well, Abe's happiest hours were spent otherwise. Almost every evening he went to the grocery store of Gentryville, the nearest village, to meet the men and boys of the neighborhood. Mr. Jones, the storekeeper, subscribed to a Louisville newspaper, which was a good thing for Abe, who read each weekly number. Then he talked over the current events with his friends. After a time, when Abe began to speak, every one stopped to listen, for he had a good memory and a gift of speech. He used simple, rough language, but he expressed his sensible thoughts clearly. He was also a natural story-teller and joker. Many an evening the crowd in the store stayed until midnight enjoying his witty sayings, his funny tales, and the rhymes that he strung together on the spur of the moment.

When working with other men in the fields, Abe

often stopped to give them a "stump speech." Jumping up on a stump as a platform, he repeated the last sermon he had heard, or a lawyer's speech in court, or his own ideas on some political topic. Whatever might be the subject of Abe's talk, the speech was never tiresome. His laughing, applauding hearers always forgot about work until the angry employer rushed to the spot and dragged Abe off the stump.

Employers whose work thus suffered were apt to say that Lincoln was lazy rather than clever. "I used to get mad at him for always reading and thinking," said one man. "He didn't love work half so much as he did his pay." But Abe could not help exercising his mind. He looked beyond the backwoods to the big world outside. When he plowed alone in the field, he carried in his coat-pocket a book. At the end of each row, as he rested his horses for a few minutes, out would come the book. Thus, as he remarked, "I learned by littles." People who have intelligence enough to take advantage of every moment deserve to succeed. Lincoln certainly was not lazy when it came to learning. In his love for hearing speeches he often walked fifteen miles to Boonville, the nearest town, when court was in session. "He was always reading, scribbling, or ciphering," observed Abe's cousin Dennis.

Abe's First Dollar.—Gentryville was not far from the big and muddy Ohio River, the great road by means of which the Indiana settlers traded with the rest of the world. It was then the practice for farmers to collect some corn or wheat or bacon, put it on a flat-boat, float down to New Orleans or some other Mississippi

River town, sell the cargo, and walk back home if they could not afford steamer passage. Eighteen-year-old Abraham was seized with ambition to make such a voyage. After much persuasion he got the consent of his parents; then he set to work and built a small flat-boat to carry his few barrels of produce.

One day Abraham stood on the river bank looking at his new boat and pondering how it might be made still stronger and better, when two wagons, each carrying a man and a trunk, drove up. The men wished to go on board an approaching steamboat. As they looked over the various floating craft along the shore, Abraham's pleased them most. "Who owns this boat?" asked one of the strangers. "I do," responded Abe. "Will you take us out to the steamer?" "Certainly," answered Abe, glad of the chance to earn something for himself.

Abe put the trunks into the flat-boat, and each passenger seated himself on his trunk. With Abe sculling at the long stern-oar, they went out to the waiting steamer. The men climbed aboard; Abe lifted the heavy boxes over the rail, and the vessel began to puff again. "You have forgotten to pay me," cried Abe, in a fright lest he should lose the expected money. Each man took out a silver half-dollar and threw it clinking down on the bottom of Abe's boat.

Could Abe believe his eyes? In less than an hour he had earned as much as he could make by four days' toil in the harvest-field. And it was the first money he had ever had for his own. Would it not be well to get out into the world, where money circulated so

freely? There might be a good chance somewhere in the great United States for even a poor backwoods fellow to succeed. "I was a more hopeful and thoughtful boy from that time," said Lincoln.

On the Great Rivers.—Soon after this time, Mr. Gentry, from whom the village received its name, decided to send his son Allen to New Orleans with a flat-boat load of produce. Abe Lincoln was then working for Mr. Gentry. Who would be a better companion for young Allen than strong Abe? Lincoln for some reason had not yet made his trip down the river, and he jumped at the chance to go. The two young fellows started off in high spirits.

Drifting down the Ohio toward the Mississippi, they traded as they went. Then the vast "Father of Waters" carried them southward toward New Orleans. One evening they tied up at a plantation near Baton Rouge. In the night seven of the plantation slaves stole aboard the boat, thinking that they could soon dispose of two boys. The swift current of the river would soon carry away the dead bodies and the slaves would have the goods. But the negroes did not know the boys with whom they had to deal.

Allen Gentry awoke, and heard the footsteps of the slaves. "Bring the guns, Lincoln!" he cried. There were no guns on board, but Abe brought something else hard to face—a big club. For a few minutes there was an exciting battle on the flat-boat, seven against two; but Abe and Allen, feeling that they were fighting not only for their property but for their very lives, attacked so fiercely that the negroes could not endure. The

slaves fled into the night, and the two boys pursued them for some distance. Then, bleeding but happy, the Indiana victors thought it wise to return to the boat and push off again down stream. For the rest of his life Abraham Lincoln carried a scar on his forehead to remind him of that desperate midnight battle.

The rest of the voyage had no special incident. The boys sold their boat and cargo in New Orleans. When they returned home Mr. Gentry felt well pleased with the success of their trip. This marked a milestone on Abe's path. He had gone out into the world, had seen far-off regions, and had known a little adventure. Though by law he was still bound to his father, he felt that he was now a man.

The Journey to Illinois. Abe Leaves Home.—In the spring of 1830, when Abe was twenty-one, two years after his flat-boat trip, Thomas Lincoln decided to move his home once more and go to the central part of Illinois. Two other families went with the Lincolns. Each family packed its goods into a big wagon drawn by oxen, and in the chilly March weather the caravan set out. Abe, now having come of age, did not need to accompany his father, but he chose to do so. In spite of the hardships and poverty of his life in Indiana, he felt sorry to leave the state. From a hill he took a last look at his boyhood home and the graves of his mother and sister. It was fourteen years before he saw them again.

Northwest the caravan pursued its way. They crossed the Wabash River at Vincennes, where, many years before, George Rogers Clark had captured the

British fort. At Vincennes Abe saw a printing-press for the first time. After two weeks of travel over muddy roads and across flooded streams, the party reached their journey's end, near the town of Decatur. Lincoln and his father put up another log cabin, split an additional lot of logs into rails, and fenced in ten acres of ground, in which they planted corn.

This was the last work which Abe did for his father. Now that the new home was established, Abe was anxious to strike out for himself. He knew that he could always make a living by his hands. The whole stock of cash which Abe possessed on his twenty-first birthday was a little over thirty dollars, but by buying "notions," such as needles, pins, thread and buttons, and selling them on the course of the journey to Illinois, Abe had doubled his money. Although this sum was a good thing to have in reserve, Abe apparently had no occupation before him except that of a laborer. Even yet, there was small prospect of fame for Abraham Lincoln.

III. MANY TRADES

Abe Keeps Store.—For nearly a year Lincoln worked as a farm-hand and woodsman in the new neighborhood. His skill and speed in splitting rails were in great demand. Once, when he needed a pair of trousers, he paid for them by making four hundred rails for every yard of cloth needed. No doubt Abraham felt very fine when he put on his new trousers, dyed brown with walnut bark. They had to last him for a long time.

Abe now hired himself to Denton Offutt for another

flat-boat trip down the Mississippi. This time Abe was to be captain. He chopped down trees on the bank of the Sangamon River, sawed out planks, and built the boat. The voyage down the Sangamon to the Illinois River, which flows into the Mississippi, had only one mishap. The boat stuck upon a mill-dam, but Lincoln cleverly released it. When he reached New Orleans Lincoln stayed there a month. It was a great slave city. Abe saw negroes chained and whipped; he saw them sold like cattle; and his kind heart rose in rebellion against these practices. "If I ever get a chance to hit slavery," he said, "I'll hit it hard."

Mr. Offutt was so pleased with Lincoln that on Abe's return he gave him charge of a store which he was opening in the new village of New Salem. This hamlet was on the Sangamon River, and happened to be the place where Abe's boat had run upon the dam. It had two stores, a grist-mill, a saw-mill, a tavern and fifteen houses, all built of logs. We do not know how honest the other store-keeper was, but we do know that he could not have surpassed Abe.

On one occasion Lincoln found that he had given a customer six and a quarter cents in change too little. That evening, after the store closed, he walked three miles out into the country to return the money. Another evening, just before closing time, a woman came in for a half pound of tea. In the dim light Lincoln hastily weighed out the tea; but next morning he saw that he had used only a four-ounce weight. He wrapped up another quarter pound, closed the store and at once delivered the extra tea.

People admired the young clerk for his uprightness. They began to call him "Honest Abe." Abe allowed no swearing in the store when women were about; if any one objected, he thrashed that person soundly. But on the other hand, the men of New Salem delighted to come to Offutt's store in order to hear Abe's comical "yarns." Mr. Offutt saw that Abe made the store agreeable to both men and women, and was delighted with his clerk. He liked to say, "Abe Lincoln hasn't an equal in the United States," and usually wound up by remarking, "He can whip or throw any man in Sangamon County." This boast nearly caused serious trouble.

The Clary's Grove Boys.—Near New Salem was another settlement called Clary's Grove. The dozen or so young fellows who lived there were a rough set, and liked to haze strangers. Fighting was their chief sport, and they kept New Salem in terror. Hearing Mr. Offutt praise Abe's strength, they appointed their best man, Jack Armstrong, to wrestle with Lincoln. The "Clary's Grove Boys" were not renowned for fair play, so Lincoln tried to avoid the match, but at last was obliged to consent lest they think him a coward.

Jack Armstrong was a "powerful twister, as strong as an ox." All the men of the two villages turned out to witness the contest. It was long and hard, but neither wrestler seemed able to win. "Now, Jack, let's quit," said Lincoln, but Jack rushed at him again and tried a "foul." Lincoln grew furious; grasping Armstrong by the throat, he shook him like a rag. The "Boys" rushed to help their leader, but Lincoln, with blazing

eyes, his back against the wall of the store, cried in trumpet tones above the uproar, "I'll fight all Clary's Grove, if I have to!"

Such a speech captured Armstrong's heart. As soon as he caught his breath he burst out, "Boys, Abe Lincoln is the best fellow that ever broke into the settlement. He shall be one of us." There was no more talk of fight. The Clary's Grove boys after that made Lincoln the umpire at their cock-fights and horse-races; and often he was also a peacemaker.

Studying Grammar.—Before he had been in New Salem six months Lincoln was the most popular person in the whole region. Abe began to feel power growing within him. "Why shouldn't I try for a public position?" he thought. "People think well of me, and I can make good speeches. I am going to work for that, anyhow." In order to improve his public speaking, Lincoln walked seven or eight miles to debating clubs. He found out that he was laughed at for his mistakes in English, so he applied for help to the schoolmaster, Mr. Graham.

"If you intend to go before the public," said Mr. Graham, "you must study grammar." "Where can I get a grammar?" asked Lincoln, who was sitting at table with his friend. Mr. Graham replied that there was but one such book anywhere about, and the man who owned it lived six miles away. Lincoln rose from the table, walked straight to the place, and came back in triumph with the book. He spent all his spare time over it, and worried his friends by asking them to hear his lessons.

The whole village became interested in Lincoln's progress. The schoolmaster explained all difficulties; the carpenter let Lincoln use his shop at night and keep up a bright fire of shavings by which to study. In a few weeks Abe had mastered the book. "Well," said Lincoln, "if that's what they call a science, I think I'll go at another." Evidently grammar had not seemed hard.

A Call to Arms.—At the end of the winter Lincoln made up his mind to launch forth into politics. Though he was but twenty-two, he boldly announced himself as a candidate to represent his district in the Illinois legislature. A month after Abraham had done so, his plans were interrupted, for he was summoned to war. Black Hawk, an Indian chief, thinking he had been wronged by the whites, had invaded Illinois, his old home. The governor sent out messengers calling for mounted volunteers, and Lincoln, with several of his Clary's Grove friends, answered the call. Enough other men from the neighborhood enlisted to make a company. They elected Lincoln as captain. No success in his after-life ever gave Lincoln more satisfaction, for it showed that those who knew him thought him a good leader.

Lincoln's men were a hard set to handle. They liked their captain, but they were not accustomed to obeying any one. Once they stole a lot of liquor; next morning, when the command to march was given, half of them were too drunk to walk. The commanding officer of the army then took away Captain Lincoln's sword and made him carry a wooden sword for two days as

a disgrace. As time went on, however, the soldiers obeyed better and better. Even when they wanted to kill an old friendly Indian who wandered into camp, they finally listened to Lincoln's orders and spared the Indian's life.

At the end of three months Lincoln returned to New Salem. The Indians had been chased out of Illinois, but Lincoln had seen no enemies. He was more pleased, however, with saving the life of one good Indian than if he had killed several bad ones. "I am no military hero," he said. "Probably if I ever got into a battle I would run away." He did not know that he would head the nation during four years of dreadful war. Those who saw him later in posts of danger never thought him cowardly.

Store or Law?—By the time Abraham returned, there were but ten days left before the election. He was a Henry Clay man, and most of the people in Illinois stood for Andrew Jackson. Abraham made as many speeches as possible throughout the county, but being almost unknown outside of his own neighborhood, he was defeated. In his own election district of New Salem, however, almost every one of the Jackson men voted for the Clay candidate, "Honest Abe." That was some comfort.

Lincoln now made up his mind to go back into the grocery business. His former employer had failed and had left town, but there were three grocery stores in the little place. Lincoln had no money; nevertheless he was perfectly willing to buy a store. By a curious combination of circumstances, he and a young man

named Berry succeeded in purchasing all three stores without paying a cent in cash; then they gayly began business.

One day a man who was emigrating to the West stopped his wagon in front of the store of the new firm. "Will you buy this barrel of odds-and-ends that I haven't room for?" he asked of Lincoln. Abraham handed over half a dollar, took the barrel, and set it away without examination. Sometime later he came across it; he emptied its contents on the floor, and found at the bottom a set of law books.

All books were interesting to Lincoln. It was summer, the farmers were busy with their crops, and customers were few. He began to study the law books, and the more he read the more interested he became. Day after day he sat outside the store under a tree, with one of the precious volumes in his hand. As the shadow moved around the tree, Lincoln, like a clock-hand, would move with it. Meanwhile Berry was left to manage the store, and Berry did so by spending on drink and gambling all the money which he could secure.

A Surveyor Just in Time.—Finally Lincoln saw that the store would not be a success. He secured the position of postmaster, but that did not pay much. Though the mail was supposed to arrive twice a week, a fortnight often passed without any letters or papers. When letters for the country people did come, and nobody called for them, Abraham would put the letters into the crown of his hat and walk out several miles to deliver the messages.

At last the county surveyor, who needed an intelligent and honest assistant, asked Lincoln if he would like to learn the business, and the offer was gladly accepted. Abraham knew nothing at all about surveying, but he determined to learn at once. His schoolmaster friend Mr. Graham helped, as he had done in the case of grammar, but this new science was not so easy. Day and night Lincoln sat at his books. His friends feared that he would kill himself with study, but Lincoln's strong body carried him through. Haggard and worn, in six weeks he surprised the surveyor by reporting for duty.

Lincoln's work as a surveyor was always well done, and the pay he received, when he was employed, was high for that time and place. Three dollars a day was the sum, more than the young man had ever before earned.[1] But Lincoln was not employed every day, and he had to run into debt for his horse and his surveying outfit.

Scarcely had Lincoln begun his work as a surveyor when he fell into misfortune. The unsuccessful store had been sold, but only a note for the price had been received by Lincoln and his partner. Before the note came due the new storekeepers disappeared, and Lincoln and Berry were left with no money to pay their own debts. Berry died, and the whole debt of eleven hundred dollars fell upon Lincoln. He could have wriggled out

[1] At that time, in Illinois, a new region, good board and lodging could be secured for a dollar a week. Every man was required to drill in the militia twice a year or else pay a dollar each time; and "as the dollar was hard to raise," said an old settler, "almost all the men came to drill."

of paying, but that was not "Honest Abe's" way. "If you will not press me," said Lincoln to his creditors, "I will see that you get your money." It was fifteen years or more before the debt, with its high interest, was finally paid off, but paid it was.

IV. A LEADER AT LAW

Winning the Election.—For a year Lincoln kept up his surveying. It gave him a fairly good income and a chance to add to his long list of friends. The business called him to travel to all parts of Sangamon County, and everywhere the people called Abe a "smart young man." Some even went so far as to say that he would one day become governor of Illinois.

When the next election for members of the Illinois legislature drew near, Lincoln again came forward as a candidate. Many times, during the long hot summer days, he was seen riding along the dusty roads. He made speeches in the public squares of the villages, in little groves, and wherever else he could get a group of people together. Sometimes he took part in wrestling matches or trials of strength in lifting; sometimes he joined the farmers in splitting rails or harvesting grain. "He's a good fellow," said those who saw and heard him, "and he's sensible, too." Lincoln, now twenty-five years old, was elected to go to the legislature for two years. Three times the people sent him back there, because he had proved himself worthy of their trust.

Reading Himself into the Law.—While Lincoln was traveling about the country, making himself known to the people, he often met another candidate, an older

man, Major Stuart. These two friends, who had served together in the Black Hawk War, had many an interesting conversation. Major Stuart was a lawyer in Springfield, the largest town of the state. As they jogged along, Lincoln told Stuart that he had made a beginning in reading law, and that he wished to continue his studies. "I'll lend you any book I have," instantly said Stuart.

This was a good opportunity. As soon as Abraham found himself a member of the legislature he began his course of study. Springfield lay twenty miles from New Salem, and in order to borrow or return books Abe often walked there and back in a day, cutting across country, over the unfenced prairie and through the woods. As he strode upon his long journey he paused frequently to read paragraphs in the volumes he carried; then, walking on again, Lincoln recited his lesson aloud. In two years he received a license to practice law, though, as Lincoln slyly said, "I was never enough of a lawyer to hurt me."

An Important Decision.—Lincoln then decided to make the bold step of giving up his profitable occupation of surveying and launching out as a lawyer. Springfield, where he was so well known, seemed the best place to settle. One April day in 1839 Lincoln set out for Springfield to seek his fortune. Cyrus McCormick and he might well have shaken hands upon it, if they had only known each other. Both young men at twenty-eight were short of money and very doubtful as to the future. But each had force of character enough to make the important decision of his life.

An Ideal Lawyer.—As Lincoln rode into Springfield he looked both queer and sad. His borrowed horse was too small for him, and his long legs nearly touched the ground. The bulging saddle-bags which were thrown across the pony's shoulders held only a few small articles of clothing; their main weight consisted of law-books. In the pocket of Abe's ill-fitting suit were seven dollars—his total wealth. A friend, however, offered him board until he could earn money, and another friend shared his bed with Lincoln. In a few days Major Stuart asked Lincoln to be his partner. Thus through the good-will and old-time hospitality of his three friends Lincoln's troubling problems were solved.

The firm of Stuart and Lincoln did not become rich through practicing law, but made a fair living. Lincoln grew noted for hurting his own business. When people came to him with a dispute he tried to make them settle it peaceably. "In law," he said, "the winner of a case is often a loser." Lincoln considered that in order to be the proper kind of lawyer he should first of all be a peace-maker. "There will still be business enough," remarked he. "When Lincoln tells the people how they must settle their disputes," said a brother lawyer, "they always submit." Usually, also, under the spell of Lincoln's kindly ways, the former enemies left his office as good friends. But such settlements did not bring large fees. If Lincoln was asked to support a case which seemed to him wrong, he flatly refused. It seemed strange to certain persons that a poor lawyer should deliberately discourage clients from

giving him money, but "Honest Abe" did so. To one man Lincoln declared, "You'll have to get some other fellow to win this case for you. I couldn't do it. All the time while talking to that jury I'd be thinking, 'Lincoln, you're a liar,' and I believe I should forget myself and say it out loud." Lincoln's one desire was—truth.

Kentucky Young Folks Meet.—Lincoln was now prominent and popular in Springfield. The young lawyer received invitations to almost all the social entertainments in the town. Though he was always polite to the young ladies, he paid them little attention; but a circle of men always gathered about him to hear his funny stories. One day, however, Miss Mary Todd arrived to make her home in Springfield. Here at last was a young lady to whom Lincoln did pay great attention. Stephen Douglas, another young lawyer, determined to cut Lincoln out, and as he excelled Lincoln in good looks and accomplishments, it seemed for a time as though he would succeed. Finally, however, Lincoln bore off the prize, and Miss Mary Todd became Mrs. Abraham Lincoln.

Mrs. Lincoln, like her husband, was a native of Kentucky. The young people received an invitation to go there as a honeymoon trip, to visit a friend, but Lincoln was too poor. "A month lost out of my work would take away the profits of a year," he said. Mr. and Mrs. Lincoln therefore took up their abode at the Globe Tavern in Springfield, where they paid the magnificent sum of two dollars a week apiece for their board and lodging. A year later a little son, Robert Todd

Lincoln, was born to them, and they bought a small frame house. Here they lived very plainly. Abraham milked the cow and fed the horse, which they kept in a tiny barn behind the house.

A Fresh Step Forward.—Now Lincoln prepared to take another step forward in political life. He had been in the state legislature long enough to prepare for larger work, so he refused another nomination and announced that he wanted to represent his district in Congress. He was defeated, just as he had been in his first trial for the legislature. Four years later he seized the chance again. He had become widely known through that part of the state for "oddity, originality, wit, ability, and eloquence." Although the candidate on the other side, Peter Cartwright, was also well known and popular, Lincoln won the day against him.

One evening, just before Lincoln started off for Washington, Mrs. Lincoln entertained a number of friends. A gentleman chanced to remark to her: "Mr. Lincoln is a great favorite in this part of the state." "Yes," she replied, "he is a great favorite everywhere. He will be President of the United States some day; if I hadn't thought so I never would have married him, for you see he is not pretty. But look at him! Doesn't he look as if he would make a magnificent President?" Her hearer found it hard to agree with the word "magnificent." That was not the adjective to describe Lincoln. He gazed at the homely, awkward giant, who never seemed to be dressed up, and thought, "Mrs. Lincoln, you are making a great mistake; you are sure to be disappointed."

To Congress and Back.—In November, 1847, Lincoln took the train for Washington. As it whirled him along, perhaps he thought of the slow ox-team which had brought him to Illinois and compared it with the swift iron horse which was bearing him away. That iron horse had not yet been used in America when Lincoln was a boy. When Abraham reached the nation's capital he found a city better than in Jefferson's day but much inferior to the beautiful Washington of the present century. The Capitol had no dome and was less than half its present size. The streets were unpaved. The parks and circles, though laid out on the city plan, had not been beautified. There was nothing except national business to attract visitors.

Lincoln soon made himself known by his speeches. People called him "able, acute, uncouth, honest and upright." In fact, they needed a string of terms, more of praise than of blame, to describe such a man, for they had never seen one just like him. The speeches he made were so admired that he was asked to make a tour through New England to speak for General Taylor. This hero of the Mexican War was a candidate for President. As Lincoln went through Massachusetts he learned how much feeling against slavery there was in the North. He heard Governor Seward make an address on the subject in Boston and that night, as he sat talking to Seward, Lincoln said gravely, "I have been thinking about what you said in your speech. I reckon you are right. We have got to deal with the slavery question."

But the time to deal with slavery so as to end it had

not yet come. Lincoln's term in Congress drew to a close. He probably could have gone back again, but he considered, with the fairness which marked his nature, that another candidate should have the chance. Lincoln took up once more his practice of law, and soon was recognized to be the leading lawyer of Illinois.

Two Famous Cases.—Cyrus McCormick at the age of forty-six had gained a great reputation for his wonderful reaping-machines, made in Illinois. He had also much trouble with inventors who apparently had stolen his ideas, or with inventors who thought he had stolen theirs. Lincoln was employed as one of the lawyers to defend some Illinois reaper-makers who were accused of trespassing on McCormick's patent. When the case came to trial in Cincinnati, Lincoln's way of talking and dressing did not suit the chief lawyer, and he selected Edwin M. Stanton to make the concluding speech. Lincoln was not allowed to appear in the case at all, and although he received a fee of two thousand dollars, he felt very bitter toward Stanton. On his part, Stanton made no attempt to conceal his scorn of Lincoln's lack of education. Later the two men came to a better understanding.

Three years later another case, in which Lincoln received not a cent, showed his grateful heart. Jack Armstrong, after his defeat in the wrestling-match, had been a good friend to Lincoln. At Armstrong's home Lincoln had stayed for weeks at a time. He had often rocked the baby while Jack's wife Hannah prepared Lincoln's meal. Now Jack Armstrong was dead; the baby, "Duff," had grown to be a wild young man,

and was accused of murder in a fight. The poor, distressed mother turned to her old friend.

PRESIDENT LINCOLN AND HIS SON "TAD"

From a photograph by Brady, now in the War Department Collection, Washington, D. C.

Hannah Armstrong found Lincoln in his office at Springfield; she told him the story and asked him his

help. "Abe," she said, "I can't pay you much, but I can give you a little."

"You don't need to pay me a cent," replied big-hearted Lincoln. "My services are free to the family as long as I live." When the trial came, "Duff" Armstrong maintained that he had fought only with his fists, but the chief witness against him declared that he had seen Duff strike the murdered man with a sort of black-jack. "How did you see this at eleven o'clock at night?" asked Lincoln. "There was bright moonlight," answered the witness. Lincoln had learned that this testimony would be given. "Bring forward the almanac I put into your hands," said he to the sheriff. The almanac proved that the witness could not have seen this by moonlight. Then Lincoln, with tears in his eyes, pleaded so strongly for the young man that there was only one thought among the jurymen. "Not guilty," said they, and "Duff" went free to his mother.

Such was the plain man who stood as the foremost Illinois lawyer, a man who cared nothing for growing rich or for making a display. He had ambition to play a good part in the world, but he never trod upon others in order to reach his goal, and he was ever loyal to his humble family and friends. A warm heart for anyone in distress, a helping hand to the poor, forgetfulness of self, a firm stand for the right—these made Lincoln great.

V. THE ROAD TO THE WHITE HOUSE

"The Lost Speech."—Lincoln's private business did not make him forget the interest which every American

citizen should have in his country's affairs. Slavery was still the burning question. One of the old political parties, the Whig, was breaking up because its leaders could not agree as to what should be done about slavery. Many Whigs, Lincoln among them, went over to a great new party, the Republican. This Republican party was intended to prevent slavery from spreading into any new Northern state, such as Kansas.

The Republicans in Illinois met to organize. After several persons had made speeches, the audience began to call "Lincoln! Lincoln!" Although taken somewhat by surprise, Lincoln came forward. He had thought so long and so earnestly about the slavery question that words came easily to his tongue. The people were thrilled. They cheered as Lincoln poured forth his eloquent address. The newspaper reporters sat spellbound. When he had finished they realized that they had forgotten to note down his words. Though on that account the speech came to be known as "Lincoln's lost speech," people long remembered its conclusion: "We will say to the southern disunionists, 'We won't go out of the Union; *and you shan't!*' " "That was the greatest speech ever made in this state," said thousands of Republicans, and Lincoln became the Republican leader of Illinois.

Lincoln Against Douglas.—After a time Lincoln came forward for the position of United States Senator, to represent Illinois and to try to keep slavery out of any new states that might be added to the nation. Curiously enough, the man against whom Lincoln was matched

was Stephen A. Douglas, who eighteen years before had been Lincoln's rival for the hand of Mary Todd.

Douglas was the exact opposite of Lincoln in looks, in manners, and in character. Douglas was short, thick-set, and ruddy; Lincoln was long, lank, and dark-complexioned. Douglas had smooth polished ways, and a flow of elegant language; Lincoln's plain manners and backwoods expressions often seemed out of place in fine society. Douglas had climbed faster and farther than Lincoln. He had gained wealth, dressed well, and spent money freely; Lincoln's income was far from great and his clothes always looked as though they were second-hand. But in character Lincoln was vastly superior. He was unselfish to the last degree; at bottom Douglas thought only of himself. Lincoln valued truth, justice and right more than success; Douglas, like Aaron Burr, was willing to sacrifice all these to gain his own ends.

Lincoln and Douglas differed, moreover, in regard to political questions. Lincoln stood firmly against slavery. "This evil shall not be allowed to spread," said he. Douglas tried to carry water on both shoulders. He wanted the votes of the North and he needed the votes of the South; so he tried to talk and act in a way that would satisfy both regions, hoping thus to gain the support of both and to become President. Being a very clever man, he succeeded very well until Lincoln entered the field against him.

Abe the Giant-Killer.—As Douglas was short in stature but great in speech, his many admirers called him the "Little Giant." The "Little Giant" had already

been Senator from Illinois for nearly twelve years. That post he considered as his own, and he bitterly resented the fact that Lincoln disputed his claim. Lincoln in truth was not fighting Douglas, but slavery, yet Douglas might well tremble. Backed by his good cause. Lincoln was a dangerous foe.

"A house divided against itself cannot stand," said Lincoln. "I believe the government cannot endure half-slave and half-free. It must become all one or all the other." He challenged Douglas to a series of debates about the slavery question. Douglas had no desire to meet Lincoln in this way. "He is the best man the Republicans have," secretly remarked Douglas. "I shall have my hands full. It will be no easy task." But Lincoln had challenged him, and there was no way out.

Seven debates were arranged in various parts of the state. The friends of Douglas loudly boasted that the "Little Giant" would "chaw up Old Abe." They gave their candidate a special railroad train, gayly decorated with posters and banners. He was met at the station of each large town by a brass band, and was escorted to the best hotel, while a salute of thirty-two cannon was fired, one for each state in the Union. Lincoln, riding with his friends in an ordinary day-coach, or even in the caboose of a freight train, was sometimes put on a side-track to let the train of Douglas sweep by. As Lincoln's friends could not compete with those of Douglas in making a show, they often tried to prove how plain they could be. While Douglas rode through the town streets in a handsome carriage, Lincoln would

be drawn about in a hay-wagon, with a banner reading, "Abe the Giant-Killer."

The debaters were fairly equal in power, but Lincoln had a wonderful advantage in one respect—he was not afraid of the truth. His pointed questions made Douglas squirm, for Douglas did not want to speak out clearly. At last the "Giant-Killer" cornered Douglas. He asked a question so that Douglas had to answer in a way that was plainly against slavery. "Douglas will beat you now," said Lincoln's friends to him. "I don't care," answered Lincoln, "I have him where I want him. He can never be President."

That was true. Though Douglas won the office of Senator on this occasion, it was his last triumph. The Southerners would have nothing more to do with him, and as the cloud of trouble thickened between the North and the South, the earnest Northerners felt that Douglas was not sincere enough for them. They turned to the man who had foiled the double-dealing of Douglas, the man who had stood firm on right principles, the man who cared more for the truth than for political honors. In 1860 they elected Lincoln President of the United States.

The Election Storm.—The Southern people considered that the election of Lincoln meant the death of slavery. Carried away by their disappointment, they forgot that Lincoln was not an abolitionist. Though hating slavery, he did not intend to interfere with it where it was already established. But the slave-holders said, "We are through with the Union." Four days after the election, South Carolina began to take measures to

"secede." Six weeks later, that state declared itself independent of the Federal government. Nowhere in South Carolina did the Stars and Stripes float except over Fort Sumter in Charleston harbor, where Major Anderson, with a few soldiers, refused to haul down his country's flag.

Soon six more Southern states joined their seceding sister. The seven states formed a union of their own, called it "The Confederate States of America," and elected Jefferson Davis of Mississippi their President. All was excitement in both South and North. What would Lincoln do? He had no right to do anything yet, for he had not yet become the head of the nation. Old President Buchanan himself was a lover of the Union, but he thought that it was not right to force the Southern states to stay in it. Old General Scott, the head of the army, agreed with Buchanan. What did Lincoln think?

There was no doubt as to Lincoln's opinions. "The tug is to come," he said. "Better now than later. Make no agreement to let slavery be extended. On that point hold firm, as with a chain of steel. If we surrender, it is the end of us and of the government." There was no doubt on either side of the Mason and Dixon line as to the stand of Abraham Lincoln.

Lincoln was to take his place as President in March, 1861. Six weeks before that time he settled up his private affairs and began to say good-bye to his old friends in Springfield. He made a toilsome journey over bad roads to bid farewell to his "second mother," Sally Lincoln, and to visit his father's grave. Sally

Lincoln was now a very old woman. "I'll never see you again, Abe," she sobbed. "They'll kill you down in Washington." Lincoln laughed at her fears and left the old lady comforted, but events proved that she was wise in being suspicious.

At last came the day when Lincoln set out for Washington. As the train bore him and a party of friends through Illinois and Indiana, the farmers crowded to see the farmer-boy who had grown so great. "Goodbye, Abe," they shouted. "Stick to the Constitution, and we'll stick to you!" By a roundabout trip Lincoln reached New York and came on to Philadelphia.

The next day was Washington's Birthday. Kansas, "Bleeding Kansas," had just been admitted into the Union as a free state. The number of stars in the flag now became thirty-four, and it was agreed that Lincoln should be given the honor of raising the first of the newly-arranged flags on Independence Hall. The people were amused, but pleased, to see the coming President take off his coat and haul away with main strength on the rope. "He's a fellow who isn't afraid of work," they said, and thought his action a good sign.

It was suspected that a plot was laid to murder Lincoln, so he slipped into Washington secretly. About a week later came the inauguration. Many men had wagered that Lincoln would never be allowed to live to be President, so a strong guard of cavalry protected his carriage. United States sharpshooters crouched on the roofs along Pennsylvania Avenue, troops lined the street and kept the swarming crowds in order, but Lincoln, deep in thought as he rode, seemed indifferent to

the excitement. His mind was on his address, in which he tried to quiet the South. "We are not enemies, but friends," rang out his peaceful message to the lovers of slavery.

The Southern leaders thought that the Northern people would not fight to keep the seceding states in the

A BATTERY DIRECTED AGAINST FORT SUMTER

Union. They misjudged the North and its leader Lincoln. He decided to send help to Major Anderson, who still refused to give up Fort Sumter. The Southern guns fired on the steamers which Lincoln sent, then began to bombard the fort, which soon was forced to surrender. "Sumter has been fired upon! This is war!" ran the tidings through the North. On the day after Sumter fell Lincoln called for seventy-five thousand volunteers to put down the rebellion.

"Abe the Giant-Killer" was determined to destroy the giant of secession; but neither North nor South realized the terrible nature of the struggle which now began. For the first time in the history of our country two Presidents stood opposed. Jefferson Davis, the slave-holding planter of the South, had challenged the Western leader who had sworn to keep slavery chained within bounds. Which would win? Both leaders were confident, but those who knew Lincoln well could have told Davis that "Old Abe" was a hard man to beat.

VI. BEARING THE NATION'S BURDEN

Lincoln in Office.—During the four years of the Civil War the White House was not a gay place. This was not the time for banquets or grand entertainments, and the President and Mrs. Lincoln lived quite simply. Often they went driving in the Presidential carriage for rest and pleasure, and sometimes attended the theater, but Lincoln was never happier than when at home with his two younger boys, Willie and Thomas.[2] Willie was a quiet boy of ten when the Lincoln family moved into the White House, but eight-year-old Thomas, or "Tad," as he was called, kept everything in his neighborhood in commotion.

So enormous were the calls on the President's time, however, that most of Lincoln's waking hours were spent in his office on the second floor of the White House. From the large windows of that big sunny room could be seen nearby the unfinished Washington Monument, and, beyond the yellow Potomac River, the blue hills of

[2] Robert, the eldest son, was then studying at Harvard College.

Virginia. As Lincoln gazed at those hills, so near, but in enemy country, perhaps his eye turned to the gleaming monument; perhaps he thought then of himself as striving to hold together the nation of which Washington had been the foremost founder and the first President.

In that office, day after day, sat the President with his secretaries. Always a light sleeper and an early riser, he was often at his desk by six o'clock in the morning. A constant stream of callers besieged this door during office hours. Although a messenger sat at the door to admit only those whom Lincoln wished to see, most callers found it easy to gain admission if they had patience to wait. Place-hunters, favor-seekers, help-needers, Lincoln listened patiently to them all.

To make it still easier for people to reach him, twice a week the President threw open the doors of his office and let all who wished come in. The long line of visitors found Lincoln, wearing a plain black suit, but with slippers instead of shoes, seated in an arm-chair beside the big table around which met his Cabinet. To each caller he gave an encouraging nod and smile; to each he gave close attention; and if he felt compelled to say "No," it was with regret that it could not be "Yes." "Why do you devote so much of your valuable strength and time to these common people, Mr. President?" many persons asked. "Because I am one of them," was the answer. One who knew him well said, "The people came to him as to a father." There had never been a President just like him, at once so strong and so kindly.

Anxious Days.—It was a time, as Thomas Paine said about the Revolution, "that tried men's souls." Upon the shoulders of Lincoln rested the heaviest burden of all; but he set himself manfully to his great task, though on every side he met fault-finding, abuse,

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GRAND REVIEW OF THE ARMY OF THE POTOMAC BY PRESIDENT LINCOLN AT FALMOUTH, VIRGINIA, IN APRIL, 1863

and actual treason. Lincoln, however, cared nothing for his own pride if he could but save the nation. As his right-hand man in the Cabinet he selected Edwin M. Stanton, the lawyer who had scorned him in the McCormick case and had called him "a long-armed ape." But Lincoln knew that Stanton, though rough and violent, was able and patriotic; so he put aside his

wounded feelings for the sake of the service that Stanton could give.

In the first two years of the war, matters went badly for the North. Robert E. Lee and "Stonewall" Jackson seemed more than a match for Generals McClellan, Burnside and Hooker. Battles were fought just outside of Washington, and the defeated Union soldiers, wounded, tired and discouraged, streamed back into the city.

A visitor one day asked Lincoln for a pass through the Union lines. "I don't think my passes are worth much," said the President. "I have given McClellan and two hundred thousand soldiers passes to go to Richmond, and they haven't gotten there yet." Another visitor asked: "Mr. President, how many men have the Confederates in their armies?" "About twelve hundred thousand," replied Lincoln with a grave manner, but with a twinkle in his eye. "Can it be possible?" cried the visitor in amazement. "Yes, it must be," came the answer. "We have four hundred thousand in our forces, and when our generals are whipped, they always say they were outnumbered more than three to one."

Some persons failed to see how Lincoln could joke when matters were going wrong. They did not know that his jokes were a relief for his overburdened mind and heart. Without the funny stories and his romps with Willie and Tad, Lincoln would have broken down. "Whichever way it ends," said he to Harriet Beecher Stowe, "I have the impression that I shan't last long after it's over." His friends were shocked to see how fast he seemed to grow older. Gray appeared in his

bushy black hair; the furrows deepened in his gaunt face, which appeared even thinner because of the beard that he now wore; there was an expression of sadness in his sunken eyes. "The tired part of me is inside," he declared.

The Emancipation Proclamation.—"Victory will come, but it comes slowly," said Lincoln. It was a doubtful

SIGNING THE EMANCIPATION PROCLAMATION

time. "I am an anti-slavery man, but my first duty is to save the Union," was the President's fixed idea. "If I declare the slaves free, I may drive into the Confederate ranks many Southern men who are now fighting in the Union army. One question at a time. First the Union, then slavery."

But as the war went on, Lincoln saw that the millions of Southern slaves were a vast help to the

Confederates. They raised the food for the Southern soldiers, they drove the supply wagons, they worked on forts and trenches. "Freeing the slaves will weaken the South," thought Lincoln. "Unless you stop fighting and acknowledge that you are part of the Union, I will declare your slaves free," said he to the Confederate states. They regarded this as an idle threat, and continued the war. On New Year's Day, 1863, Lincoln therefore issued the famous Emancipation Proclamation, which, although it did not abolish slavery, declared every slave free within the country held by the Confederate army.

Though, after the slaves heard of the Emancipation Proclamation, many escaped to the Union army and many others secretly helped the Union soldiers, the Confederates were still unbeaten. They defended themselves strongly against General Grant on the Mississippi; a large army under Lee invaded the North. At Gettysburg General Meade with his Union soldiers met Lee's Confederates. It was a desperate three days' battle, but at last Lee suddenly retreated and Philadelphia, Baltimore and Washington were saved. That was the "High-water mark of the rebellion." Never afterward did the Confederates come so near to success.

The Gettysburg Address.—The state of Pennsylvania immediately bought a part of the battle-ground as a cemetery for the bodies of the Union soldiers killed in that bloody encounter. Edward Everett, the best orator of Massachusetts, was selected as the chief orator at the dedication exercises. President Lincoln was also invited to attend and to make a short speech. On that

November day, Everett, white-haired and fine-looking, delivered one of his best orations. Everything in the two-hour address was beautiful, clear and impressive.

When Everett had finished, Lincoln advanced to the front of the platform, put on his spectacles, held a single sheet of paper close to his eyes, and in his high voice

LAST FORMAL RECEPTION GIVEN AT THE WHITE HOUSE BY PRESIDENT LINCOLN

began to read. Not all could hear him, but those who caught the words felt their hearts moved and melted. So brief was the speech that the photographer who was preparing to take Lincoln's picture found the speech over and Lincoln gone before his camera was ready; but the address stands to-day as one of our classics.

Lincoln himself thought but poorly of the address. He had written it hurriedly, straight from his heart,

with no time to "polish" its sentences. As he ended he turned to Everett, grasped the orator's hand, and said, "I congratulate you on your success." "Ah, Mr. President," responded Everett, "how gladly would I exchange all my hundred pages for your twenty lines!" To-day we have forgotten Everett's Gettysburg address, but Lincoln's few words are loved and remembered by every educated and true American.

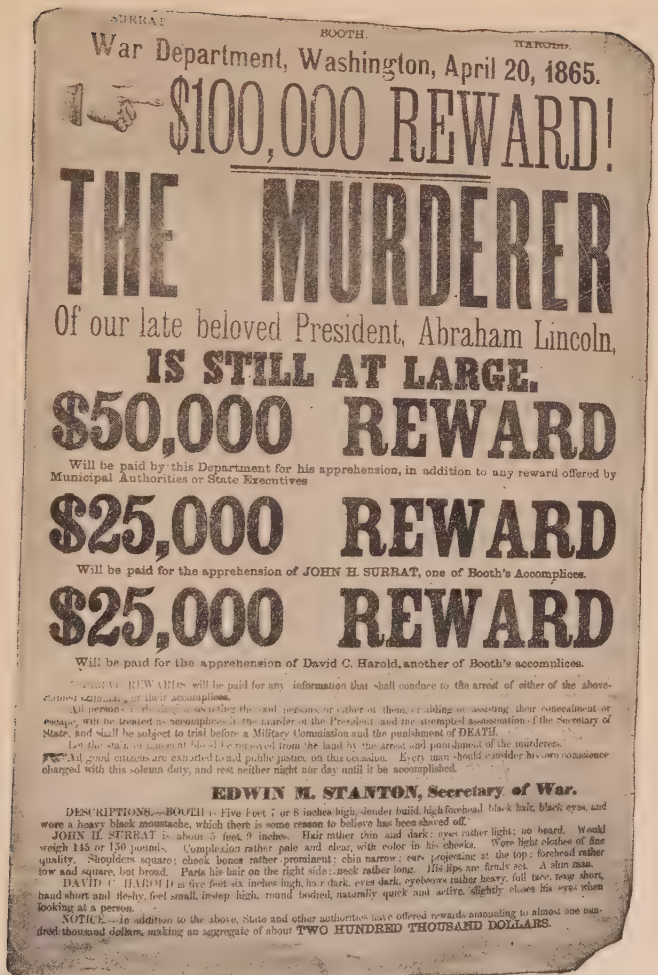
Lincoln in the Chair of Davis.—On the same Fourth of July—"the best since 1776," said General Sherman—when Lee was beaten at Gettysburg, Grant forced the surrender of Vicksburg. Now the Union forces, while holding the Confederates strongly on the North, closed in on them from the west and south. Grant was made commander of all the Union armies. With smashing blows he struck the tired Southerners. They staggered and at last slowly yielded. The Union flag rose over Richmond, the Confederate capital.

Lincoln was with General Grant's army when Richmond fell. "Thank God that I have lived to see this!" burst from his heart. "It seems to me that I have been dreaming a horrid dream for four years, but now the nightmare is gone. I want to go into Richmond." When Lincoln and his small boat-party reached the city, the negroes crowded around him and kissed his feet. A great procession of curious people accompanied him as he slowly made his way to the White House of the Confederacy, the home of Jefferson Davis. "President" Davis had fled, and Lincoln dropped into Davis's own study-chair to rest. The contest between the two leaders had been decided.

Lincoln's heart was glad. The days seemed full of sunshine. He had just begun his second term as President and he expected to devote most of his attention to the question, "How may the South and the North be made one again?" It was most unfortunate for the South that Lincoln's kindly nature had no chance to solve the perplexing problem.

"Our President is Dead."—It was April 14, 1865, five days after Lee's army surrendered to General Grant at Appomattox. The President ordered his carriage and took an afternoon drive alone with his wife. His mind was full of mingled thoughts and feelings, and he wished for a long heart-to-heart talk. "Mary," said he while they drove along, "we have had a hard time of it since we came to Washington; but the war is over. With God's blessing we may hope for four years of peace and happiness, then we will go back to Illinois and pass the rest of our lives in quiet."

Happy in his dreams of the future, that night the President accompanied Mrs. Lincoln to Ford's Theater. How the people cheered as he entered his flag-draped box above the stage! The play was nearing its end when a young half-crazy actor, John Wilkes Booth, who had favored the Southern cause, stole into the box. Placing a pistol within a foot of Lincoln, he fired, and a ball entered the President's head. Major Rathbone, who was in the box, grappled with Booth, but was stabbed. Leaping from the box down upon the stage, Booth waved the bloody knife, shouting, "The South is avenged!" He reached the stage door, mounted a waiting horse, and disappeared. Ten thousand cavalry



SURRAT BOOTH. HAROLD.

War Department, Washington, April 20, 1865.

$100,000 REWARD!

THE MURDERER

Of our late beloved President, Abraham Lincoln,

IS STILL AT LARGE.

$50,000 REWARD

Will be paid by this Department for his apprehension, in addition to any reward offered by Municipal Authorities or State Executives

$25,000 REWARD

Will be paid for the apprehension of JOHN H. SURRAT, one of Booth's Accomplices.

$25,000 REWARD

Will be paid for the apprehension of David C. Harold, another of Booth's accomplices.

A LIBERAL REWARDS will be paid for any information that shall conduce to the arrest of either of the above-named criminals, or their accomplices.

All persons harboring or secreting the said persons or either of them, or aiding or assisting their concealment or escape, will be treated as accomplices in the murder of the President and the attempted assassination of the Secretary of State, and shall be subject to trial before a Military Commission and the punishment of DEATH.

Let the stain of innocent blood be removed from the land by the arrest and punishment of the murderers.

All good citizens are entitled to a public justice on this occasion. Every man should consider his own conscience charged with this solemn duty, and rest neither night nor day until it be accomplished.

EDWIN M. STANTON, Secretary of War.

DESCRIPTIONS.—BOOTH is Five Feet 7 or 8 inches high, slender build, high forehead, black hair, black eyes, and wore a heavy black moustache, which there is some reason to believe has been shaved off.

JOHN H. SURRAT is about 5 feet 9 inches. Hair rather thin and dark; eyes rather light; no beard. Would weigh 145 or 150 pounds. Complexion rather pale and clear, with color in his cheeks. Wore light clothes of fine quality. Shoulders square; cheek bones rather prominent; chin narrow; ears projecting at the top; forehead rather low and square, but broad. Parts his hair on the right side; neck rather long. His lips are firmly set. A slim man.

DAVID C. HAROLD is five feet six inches high, hair dark, eyes dark, eyebrows rather heavy, full face, nose short, hand short and fleshy, feet small, instep high, round bodied, naturally quick and active, slightly closes his eyes when looking at a person.

NOTICE.—In addition to the above, State and other authorities have offered rewards amounting to almost one hundred thousand dollars, making an aggregate of about TWO HUNDRED THOUSAND DOLLARS.

POSTER ANNOUNCING THE REWARD FOR THE APPREHENSION OF PRESIDENT LINCOLN'S ASSASSIN

were soon on his track, and two weeks later Booth fell dying on the floor of a blazing Virginia barn with a shot in his own brain.

The bleeding and unconscious President was tenderly carried from the theater to a house across the street. Mrs. Lincoln and Robert, with many more, watched there through the night, but there was no hope. Had not Lincoln been such a strong man, said the doctors, he would have died within an hour. Daylight came, and, soon after, Lincoln drew his last breath. "Now," said Secretary Stanton, "he belongs to the ages."

The telegraph spread over the country the sad news. Work almost ceased. Stores closed. The cities of the North were robed in black. Bells were taken off the horses which drew the street-cars. Flags hung at half-mast. The people groaned, "Our President is dead!"

A week later a black train bearing the coffin of Lincoln and that of his son Willie, who had died three years before, left Washington on its way to the Middle West. It followed the same route which four years earlier Lincoln had traveled as he came to Washington. Vast crowds assembled along the line and stood for hours in darkness or in rain to catch one glimpse as the funeral car passed. The spring was coming to its height, but there was no gladness in the land. The cry of the mourning hearts was, "Our President is dead!"

At Springfield old friends and neighbors tenderly received the body of their great leader, and it was laid away in the beautiful Oakland Cemetery. His work was done. He had given the nation a new freedom and

secured it a united and glorious future. The memory of Lincoln is set high in our minds and our hearts. With each successive year our land reverences him more deeply and sees more truly how noble was his life. Side by side stand the great Americans—Washington, the founder of the Union; Lincoln, its preserver.

FOR DISCUSSION AND LIBRARY WORK

1. Could you say that the two boys, Cyrus and Abraham, were neighbors?
2. How many of Abraham Lincoln's early favorite books have you read? Which do you like best?
3. How were flat-boats usually navigated on the Ohio River?
4. Where was Abe Lincoln living when the first steamboat went down the Ohio?
5. How could Lincoln in making change give a customer six and a quarter cents too little?
6. What other famous men managed to become lawyers without passing through a law-school?
7. What did Lincoln mean by saying, "In law the winner is often a loser"?
8. Name the thirty-two states for which the guns were fired in honor of Douglas. What states have been added since that time?
9. What is meant by saying, "Lincoln was not an abolitionist"? Did he not hate slavery?
10. What is meant by "a free state"?
11. Why was it such an honor for Lincoln to raise the new flag over Independence Hall?
12. Tell the story of the attack on Fort Sumter.
13. Find some amusing stories of "Tad" Lincoln's pranks about the White House.
14. What kind of passes did Mr. Lincoln give to General McClellan and his soldiers?
15. What is the special meaning when we speak of Gettysburg as a "high-water mark"?
16. Why was Booth permitted to gain entrance to the President's private theatre-box?
17. Find a description of the funeral ceremonies for Lincoln in the city where you live.

ULYSSES SIMPSON GRANT
1822–1885

CHIEF OF THE BLUE

"We are now in the midst of trying times, when every one must be for or against his country and show his colors, too, by his every act."—*Letter to his father in 1861.*

I. THE WEST POINT CADET

Ulysses, the Horse-Lover.—One fine day in May, when Abraham Lincoln, no doubt, was working on an Illinois farm, young Mrs. Grant of Ohio took her first baby and rode ten miles by carriage to show it to her father and mother. Of course, the grandparents were delighted to see their grandson. "What is his name?" they asked. "We haven't named him yet. Mr. Grant leaves that to me. What do you suggest?" answered Mrs. Grant. Every one in the household had a favorite. One aunt liked "Theodore," an uncle preferred "Albert," the grandfather wanted "Hiram," a good Bible name, and the grandmother chose "Ulysses," after the wisest soldier of the old Greek stories. They shook up in a hat slips of paper bearing the names suggested, and the grandmother's selection was drawn out first. Then it seemed a shame that the grandfather should be disappointed, so the baby went home called Hiram Ulysses Grant.

ULYSSES S. GRANT

Mr. Grant, the father, had a tannery in Georgetown, a village not far from Cincinnati, and the horses that were used to haul the tan-bark, the raw hides, and the leather were a delight to little Ulysses. When, at three years old, his father swung him up to the back of one of the horses, Ulysses at once gathered up the reins in his tiny hands and made it plain that he thought he could ride without help. At the age of five he did ride alone on the team-horses as the men drove them. At seven the boy was trying various circus tricks, though he had never seen a circus; and by the time he was ten he could ride "like a monkey." One of his feats was to stand on one bare foot on a sheepskin which took the place of a saddle, and balance himself while the horse was running at full speed.

Horses or School?—The neighbors watched, and said, "Liss Grant is far more at home in the saddle than he'll ever be in school." This ten-year-old youngster had never gone to school at all. There were not many schools in southwest Ohio at that time. Mr. Grant, himself, although a successful business man, had received but little education. He had taught himself to write, and he was a great reader, so he decided that his son should be well educated. Like many busy fathers, however, Mr. Grant left to his equally busy wife the early instruction of his boy. Mrs. Grant taught Ulysses to read and write, but she did more than that; her lessons influenced him to be manly and straightforward. Like Abraham Lincoln's mother, Mrs. Grant tried to give her son the best gift of all, a good character.

When at last he was sent to school, Ulysses did not

like it much. He would rather have been sent to the barn or the field. Arithmetic came easily to him, and he was interested in geography because he hoped some day to be a great traveler. But neither arithmetic nor geography was half so attractive as were his beloved horses. In addition to his tannery, Mr. Grant owned and farmed considerable land, and Ulysses loved to do any farm-labor in which horses were used. He always got a wonderful amount of work from the teams with very little trouble, and earned a good sum of money by training horses for the neighbors.

The Future Cadet.—Mr. Grant, who was prospering, gave Ulysses an unusual opportunity by sending him to boarding-school or academy for a couple of winters. At sixteen, the lad had gone through the courses that were offered, though it cannot be said that he had mastered them. "It's time to choose your business in life," said his father. "Will you go into the tannery with me?" "No, I hate it," replied Ulysses. "What do you want to do, then?" asked Mr. Grant. "I'd like to be a farmer, or a trader on the Mississippi," answered the boy. "How would you like to go to the West Point Military Academy?" said Mr. Grant, who knew there was a vacancy which his son could fill. "First rate," Ulysses declared.

Upon application to the Congressman from that district, the place was given to "Liss." But when Mr. Grant came home with the news, "Liss" had changed his mind, fearing that he would only fail as a cadet in that strict school. "I won't go, father," said he. Mr. Grant looked him straight in the eye. "Oh, yes, you

will," he answered, and Ulysses changed his mind back again.

The Georgetown people agreed with Ulysses that he would not do very well at West Point. One man went so far as to say to Mr. Grant, "Why wasn't some one chosen who would be a credit to the district?" Ulysses, indeed, was not much for looks. No one except his parents imagined that the "stumpy, freckle-faced, big-headed country lad" would be a true soldier. So quiet and backward in company was he that the boys of the town called him "slow." As they gathered in the spring evenings in the court-house square, one of their pet jokes was to tease "Useless" about his becoming an army officer.

What's in a Name?—Ulysses, with no great expectation of success, packed his trunk studded with his initials in brass-headed tacks. "H. U. G. spells hug, and the boys will plague me," he complained, so he changed the tacks to read "U. H. G." It took Ulysses and his trunk a week to reach Philadelphia, three days on the steamboat to Pittsburgh and three days on the canal to Harrisburg. From Harrisburg he took the first train ride of his life, which brought him to the Quaker City, where he had relatives.

Philadelphia seemed wonderfully great to the Ohio boy. For five days he wandered about its streets in delight. Doubtless he went to view the main building of Girard College, which was then being erected, and which was one of the sights of the city, for it was patterned after a Greek temple. At last Ulysses reached beautiful West Point on the Hudson, and to his great

amazement, he found the cadets were anxiously waiting for him to appear.

The interest of the cadets had nothing to do with any deeds of Ulysses; it was all on account of his name. The Congressman who made the appointment had sent in the boy's name wrong. Ulysses had a younger brother called Simpson, and the Congressman had confused the two boys. "Ulysses Simpson Grant" was the title the West Point officers received from Ohio, and on the bulletin board where the names of the new cadets to come were posted, appeared "U. S. Grant." "Uncle Sam Grant!" the West Point boys shouted, and as "Sam" Grant Ulysses was known all through his stay at the Academy.

Days at West Point.—West Point was a place for hard work. There was plenty of drill and study, but not much amusement for the cadets in their gray jackets and tight white trousers. "Sam" Grant disliked most of the soldiering and most of the studying. He could not keep his coat trim, his collar clean, his brass buttons bright. He could not even keep step in marching. His list of demerits or "blackmarks" grew long. Writing to his cousin in Ohio, soon after he entered the Academy, Ulysses said, "To show how easy one can get these, a man by the name of Grant got eight of these marks for not going to church. If a man gets two hundred a year they dismiss him." Grant never piled up more than one hundred demerits yearly, but on the conduct roll his name always appeared in the latter half of the list. As to studies, Grant fared somewhat bet-

ter, because he did well in drawing and mathematics, but French he utterly failed to learn.

When the cadets went to the riding-school, however, "Sam" came to the front. Not even the instructor could equal him. One of the horses, a big sorrel named York, objected to being ridden. His clever trick of rearing up and tumbling over backward discouraged the boys. "I will send him away," said the master. "Let me try him," begged Grant.

York found that jumping about would not dislodge this persistent fellow, so he began to carry out his scheme of rearing and falling. But at the moment York rose on his hind legs, down between his ears came the heavy butt of Grant's pistol. The astonished horse stopped short, but soon tried it again, only to receive a second painful blow. To make the story short, Grant, by a mixture of firmness and kindness, broke York of his bad habits and then trained him beautifully. One of the sights of the riding-class was the daily leap of York and his rider over a bar higher than a man's head. For many a year no cadet could match that feat.

A St. Louis Sweetheart.—Quiet "Sam" made few close friends among his classmates, but no enemies. Once he got into a hot dispute with a Southern cadet, Fred Dent, about the slavery question. The two finally stripped off their coats and were all ready to settle the matter with their fists, when the funny side of the affair struck them and it ended in a hearty laugh. During the senior years of "Sam's" stay, Fred Dent was his room-mate and dear friend.

Four years of cadet life brought Grant and Dent to

their graduation day, and they became second lieutenants in the army of the United States. Grant, now twenty-one, had greatly improved during his course. He was straight and slender, though not tall, and his pleasant face and manners offset his shy behavior. Naturally Lieutenant Grant asked to enter the dragoons, but there was no vacancy, so he joined the infantry. Though in the army, and bound to serve for at least four years more, he cared nothing for it as a profession. When his four years were over, he hoped to become teacher of mathematics in some college.

Meanwhile Ulysses was sent to the West, to Jefferson Barracks, near St. Louis. Strangely enough, about five miles from the barracks stood a big white plantation house which was Fred Dent's home. Fred had been sent far away, but Ulysses, his friend, found a warm welcome at White Haven, as the Dent house was called.

Julia Dent, the seventeen-year-old daughter, was away on a visit when Ulysses began his visits to White Haven. When she returned, Grant found the house still more attractive. Before Julia had been home a month, her friends were teasing her about "the little lieutenant with the big epaulets." Julia, like most Southern girls, loved to ride, and the two young people spent many an hour together on horseback. Mr. Dent saw that the affair was becoming serious. He thought of his prosperous store in St. Louis, of his thousand-acre plantation with its many slaves, and decided that the poorly-paid boyish lieutenant was no good match for his daughter.

The Mexican War.—Trouble was now brewing between the United States and Mexico, on account of Texas. War seemed so near that it seemed best to move troops toward that region, and the regiment of Ulysses was suddenly ordered to Louisiana. Grant could not think of going without a last talk with Julia. He saddled his horse and galloped off toward White Haven. On his way a flooded stream barred the path. The lack of a bridge did not stop the determined lieutenant. Straight into the water he urged his horse and with some difficulty reached the other bank. It was a soaking wet officer who was greeted by Julia Dent; but he received his reward. Before they parted that day the couple were engaged, and it was with a hopeful heart that Grant set off southward.

The Mexican War began. Lieutenant Grant got his full share of the fighting. He saw his comrades fall dead and wounded by his side, but he kept his nerve, showed no excitement, and did good service. "You want to know what my feelings were in the field of battle," wrote he to a friend. "I do not know that I felt any peculiar sensation." At last the Americans came within sight of the capital of the country, the City of Mexico. As they paused to consider how best to attack it, a tall Virginia captain, Robert E. Lee, rode up to the wagons of which Lieutenant Grant had charge, and passed the time of day with him. The two met many years later under very different circumstances.

Married and Parted. Leaving the Army.—After awhile the United States Army conquered its enemy, and

Grant's regiment came home. Julia had not seen her soldier for over four years. Do you think the time had seemed long? As soon as Ulysses could get a furlough, the young couple were married. Now Mr. Dent felt proud of his son-in-law, who at twenty-six had rendered distinguished service on the battle-fields, had been promoted to first lieutenant, and had been promised a captaincy as soon as possible.

Several more years passed away while Grant and his wife were stationed at various posts, but his pay was too small for his needs. The Pacific coast was fast being settled, and the regiment was called to Oregon. Grant did not wish to expose his wife and baby boy to the dangers of the fever-haunted road over the Isthmus of Panama, but he thought that in the Golden West he would be sure to discover a way to make money. Mrs. Grant went back to her father's house and Captain Grant unwillingly left her once more.

The days in the fort on the Columbia River were lonely and dreary. Grant invested some of his pay in business ventures, but business was never his strong point, and he lost instead of winning. Though Grant had risen to the rank of captain, each month he grew more sad and silent, and at last his fellow-officers learned that he was foolishly drinking to drown his sorrow. The amount which Grant took was not enough to show on many men, but his head could not bear liquor. A few glasses would flush his face and make him stupid. The colonel found out Grant's unfortunate habit. He warned Grant, but without effect, and soon his colonel asked Captain Grant to write out his

resignation. The gallant boy of the Mexican War left the army in disgrace.

II. THE FIGHTING GENERAL

Hard Times at "Hard Scrabble."—On his way to rejoin his wife, Grant stopped to see his father's family. The mother received him with open arms, but the father and brothers plainly showed that they considered Ulysses a failure. Soon Grant, cut to the heart, left them and hastened to White Haven. There he found his wife with their two children, the younger of whom he had never seen. It was joy to be with them once more. As, however, a living had to be made, Grant lost no time in making a start.

Mr. Dent had given to Julia, as a wedding present, a small portion of his big plantation. On this small farm Grant cut down some trees and built from the logs a four-roomed cabin, which he fitly called "Hard Scrabble." There Julia Grant began housekeeping again. Mr. Dent loaned Grant a thousand dollars, so he was able to buy a stock of farm animals and tools. Now, as in the old boyish days, Captain Grant at thirty-two followed the plow and drove his wagon.

There were hard times at "Hard Scrabble." The crops did not do well. Grant struggled to get along. In good weather or in bad he worked just the same. When nothing else could be done, he hauled cord-wood from the farm and sold it in St. Louis. Work and worry began to age the silent man, who now had three children to support. He lost his soldierly straightness and grew stoop-shouldered.

At last, after three years of disappointment, thinking he could make more money on a larger farm, Grant left "Hard Scrabble" and rented Mr. Dent's plantation. With three negroes to help him, he managed to plant a large amount of various crops, and hoped for a good season. Then came an unexpected misfortune; Grant fell sick with chills and fever. For days at a time he could do no work. The laborers took advantage of his illness and neglected their duties. Again the crops proved poor, and that fall, giving up the fight, Grant sold his farming outfit and moved into a tiny house in St. Louis.

The War Begins.—Mr. Dent found a place in a real-estate office for his son-in-law, but again Grant showed that he was no business man. He could not even make a success at collecting rent, for the tenants soon learned that Grant's soft heart believed any "hard luck story." From one thing to another went Grant. An evil fate seemed to pursue him. Mr. Dent grew impatient and thought his son-in-law almost worthless. After a year of this hand-to-mouth life, old Mr. Grant offered a little help. He had established a branch of his tannery in Galena, a town in the northwest part of Illinois. The two brothers of Ulysses were managing the tannery, and Ulysses could come and be a clerk, if he cared to do so. "It's that or nothing," thought Grant, and without delay the family took the Mississippi steamer to Galena.

The stoop-shouldered, brown-bearded man who for a year bent over the account books in the store took lit-

tle part in the affairs of the town. What a change in his life from the time when he was a dashing horseman in the army! But a return change was coming. Lincoln was elected President, and the next spring came the

From the collection of F. H. Meserve

GRANT AT COLD HARBOR

news that the Southerners had fired on Fort Sumter. Grant felt that now there was real work in his special line. "We have a Government, and laws, and a flag, and they must all be sustained," said he.

Galena was a patriotic town. Its men quickly made up a company of volunteers, and they asked "Cap" Grant to show them how the "regulars" drilled. When Grant stepped before the ranks the soldier in him shone out. He straightened up; his orders rang clear and sharp. "He's a regular, sure enough," said the company. "He must be our captain." But Grant declined. He knew that there was bigger work in the war for a man of his experience. Soon the Galena men went off to Springfield, and Grant took the same train, because he had volunteered his services to the governor of his state.

The Quiet Colonel.—In Springfield Grant helped in various odd jobs connected with the army, but his desire now was to be an officer once more. He wrote to Washington asking for the command of a regiment, but his letter went into a pigeon-hole, where it stayed for several years. Grant's chance came in a different way. A new regiment stationed at Camp Yates, near Springfield, had become disorderly. Its colonel could do nothing with the men. Governor Yates thought of the quiet soldier who had helped to get other affairs into shape, and offered Grant the regiment. "I accept," was the reply.

Two Congressmen went out with Grant to Camp Yates. The regiment was drawn up in line, and the Congressmen made speeches to the soldiers. Then the men wanted to hear their new colonel, and perhaps were ready to "guy" him a little. When Grant stood up, the men laughed outright. He had no uniform, his coat was out at the elbows, and his hat was the

worse for wear. "What will this new fellow say?" sneered the soldiers. Grant did not detain them long. His speech consisted of four words, "Go to your quarters."

In ten days the regiment had so changed that its former colonel would not have known it. Grant himself knocked down and gagged its worst bully. He poured out on the ground the whiskey that the men carried in their canteens. If the men were not dressed for drill at the time Grant set, the drill went on, with some men coatless or capless, some even barefoot. The colonels of the other new regiments in the camp came to watch how Grant managed his men, and they found that he handled these toughs without an angry word or an oath.

The Fighting General.—The regiment was sent to fight along the Mississippi, and Grant proved himself the best colonel in that part of the country. On one occasion he was sent to attack a well-known Confederate colonel whose force of men slightly exceeded Grant's. As Grant led his regiment toward the Confederate camp he felt many fears about the result of the coming battle; but when the Union soldiers drew near the enemy's post, Grant found that his foe had retreated. "He was as much afraid of me as I was of him," thought Grant, and never afterward did he fear to strike the opposing force.

Before the first summer of the war was half ended, President Lincoln appointed Colonel Grant a general. Experienced men who could win success were rare in the Union army, and they rose fast. Under Grant's command, strangely enough, was his old commander

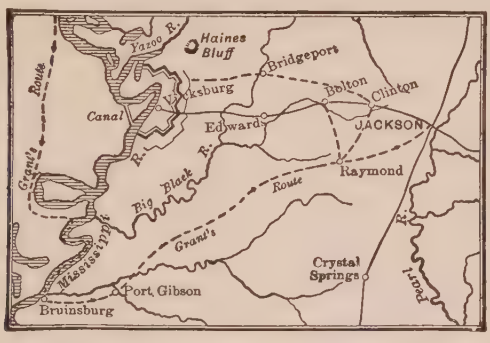
at West Point, Charles Smith. General Grant was stationed along the Mississippi to watch the Confederates. He led a few thousand men to attack the enemy at Belmont, Missouri. It was not much of a victory for either side, but the Union troops had to withdraw on their steamboats. Grant was the last to leave the field. The gang-plank of the rearmost boat had been pulled in from the bank when Grant and his horse slid down the slope. Under a heavy fire of musketry, his men ran the plank out again, and the commander rode aboard unhurt.

Soon the North was delighted to hear that Grant had captured two of the strongest Confederate forts in Tennessee, with twelve thousand men. When the Southern commander asked for Grant's terms of surrender, Grant replied, "No terms except an unconditional and immediate surrender can be accepted. I propose to move immediately upon your works." The Confederate general at once gave up the idea of resistance. Now Grant's name became a household word. The Union men said that his initials stood for "Unconditional Surrender Grant." President Lincoln raised his successful fighter from brigadier-general to the next rank, major-general.

Success upon Success.—The two great strongholds of the Confederates were Richmond and Vicksburg. On a high bank of the Mississippi Vicksburg stood. Around it lay tangled swamps. Its guns swept the waters of the river and kept Northern vessels from coming past. "I will capture Vicksburg," declared Grant. With a large army and a fleet of gunboats he undertook the

task. For many days the Union soldiers tried to force their way through the narrow paths of the swamps. The Confederates drove them back. For many days the gunboats tried to push through the winding channels and reach a point from which they could safely bombard the city high above them. The boats found no passage.

Five months were spent in this fruitless labor.



GRANT'S VICKSBURG CAMPAIGN

Many people said, "Grant is wasting the lives of our brave boys. He is either foolish, stupid, or drunken." But Lincoln answered, "I can't spare this man. He fights. If I knew what kind of whiskey he drinks, I would send a barrel to each of my other generals." Finally Grant succeeded in drawing his net tight about the town. Vicksburg was garrisoned by thirty thousand Confederates. They defended themselves bravely, but day and night Grant rained shells upon them. The wretched townspeople dug caves in which to shelter. Food became scarce Flour sold at ten Confederate

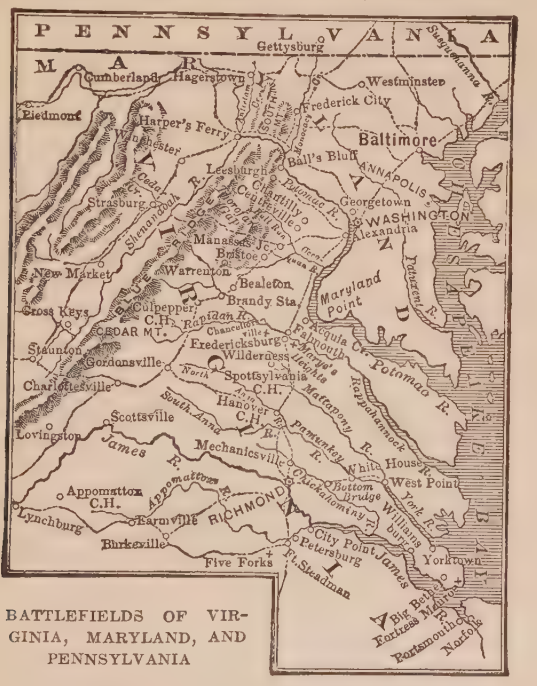
dollars a pound and bacon at five dollars, and mule-meat was thought a fine dish. Finally, on that Fourth of July when Lee retreated from Gettysburg, the Confederate leader surrendered Vicksburg. Grant captured all of the garrison and one hundred and seventy-five cannon. It was the greatest haul of the war. "Vicksburg and Gettysburg!" cried the joyful people of the North. "Hurrah for Grant and Meade!" From that wonderful Fourth onward the Union men were confident of winning.

Grant was soon made commander of all the armies west of the Appalachians. With his three famous helpers, Sherman, Thomas and Hooker, he completely conquered the Confederates in Tennessee. Many people began to say that Grant would make a good President, but Grant himself wrote to his father: "I am not a candidate for any office. All I want is to be let alone to fight this war out." "That is the right kind of talk," thought President Lincoln, and he made Grant lieutenant-general, with command over all the armies of the United States.

On to Richmond.—To receive this great honor Grant went to Washington. When he called at the White House to pay his respects to President Lincoln, the visitors there crowded around him so closely that Secretary Seward induced Grant to stand upon a sofa to be seen by all. The crowd saw "a short, round-shouldered man, in a very tarnished uniform. He had rough, light-brown whiskers, a blue eye, and rather a scrubby look." There certainly was no style about the great soldier. The next day in Lincoln's office,

this plain commander received his great commission as head of all the armies. "As the country herein trusts you," said Lincoln, "so, under God, it will sustain you."

Now, at the beginning of 1864, Grant laid out his



BATTLEFIELDS OF VIRGINIA, MARYLAND, AND PENNSYLVANIA

plans to end the war. There was only one way to do it quickly; that was to hit, hit hard, and keep on hitting. Meade was to hit from the north and Sherman from the south and west. It would be a terrible struggle, and many thousand soldiers would fall, but there was nothing else to be done. The North had still plenty of men to fill the ranks, while the South had "robbed the cradle

and the grave'' to get troops. All that Grant needed to do was to stick to his purpose; and he was just the man to do that.

Secretary Stanton objected to some parts of Grant's plan, but when he complained to Lincoln, ''Old Abe'' said, ''Now, Mr. Secretary, you know we have been trying to manage this army for nearly three years, and you know we haven't done much with it. We sent over the mountains and brought Mr. Grant to manage it for us, and now I guess we had better let Mr. Grant have his own way.'' Grant had his way, for Lincoln trusted him. One beautiful day in May, Grant, sitting on a log by the roadside in Virginia, wrote out a telegram to Sherman, telling him to start forward. The death-struggle of the Civil War was about to begin. Grant was headed straight for Richmond.

III. CONQUEROR AND PRESIDENT

Fighting it Out.—Grant's strong drive toward Richmond was stubbornly resisted by Lee, while Johnston in the south opposed the advance of Sherman. It was in the struggle between plain Grant and stately Lee that the North showed greatest interest. The two skilful commanders were well matched. Grant led the stronger force, but Lee's entrenchments offset this advantage.

Lee had been able to outwit and to drive back every other Union general who had marched into Virginia; but Grant he could not stop. There was fierce hand-to-hand fighting, there was desperate assault and heroic repulse. Both armies covered themselves with glory.

In spite of the wonderful bravery of the Confederates, however, the Federals pressed ever southward. Fifty thousand men were lost from Grant's ranks in a month of fearful slaughter. Many Northerners looked at the list of casualties and cried "Butcher Grant!" Yet the

THE SURRENDER OF GENERAL ROBERT E. LEE

general sternly said, "We will fight it out on this line if it takes all summer."

It did take all summer, and all winter, too. Though Grant's army now lay close to Richmond, Lee was safe behind his breastworks. Other Union generals had come within sight of Richmond before, and had gone back again in defeat. Grant, like a bulldog, was bound to hold fast. He took up his quarters in a log-cabin at

City Point, on the James River below Richmond. From that spot he watched affairs with a sharp eye, all through the cold months. To the cabin, for a stay of many weeks, came his wife and their little son Jesse. His most illustrious visitor was President Lincoln.[1] Old Mr. Grant also appeared at the cabin. "Won't you let me have the hides of all the cattle you kill for this big army, Ulysses?" asked he. But Ulysses shook his head. His father must not make profits out of the son's army. That would never do.

Richmond Falls.—March, 1865, came. Grant's men began to move once more. Sherman with a hundred thousand troops was sweeping up toward Richmond, but Grant would not wait for him. He sent General "Phil" Sheridan to cut the railroad which brought Lee's supplies from the South, and it was successfully done. Another assault broke Lee's line of entrenchments. "We'll end it right here," growled Grant. Lee saw that Richmond could not be held any longer. Only on the west was there a chance for escape. He decided to retreat in that direction while he could.

It was a bright April Sunday. President Lincoln was at City Point, reading messages of good cheer that came in from Grant. Jefferson Davis, President of the Confederates, sat in his pew in St. Paul's Church, Richmond, trying to find comfort in the services. A messenger came up the aisle and handed to Davis a note. The word was from General Lee. Richmond must fall into Grant's hands. The President's face turned gray;

[1] The cabin is now preserved near Lemon Hill, Fairmount Park, Philadelphia.

he rose and left the church. Every one knew what that meant.

That night Davis and his Cabinet fled from the city as Lee's men marched out toward the west. "I will not give up the fight," thought Lee. "If I can join with the remains of Johnston's army, we'll give the Yankees a hard struggle yet." But the wearers of the blue followed hard on his heels. There was fight after fight. Hungry and tired though they were, the Confederates, ever retiring toward the Blue Ridge, battled for eighty miles like brave men. At the end of the week, Sheridan's cavalry galloped squarely between them and the mountains, while Meade pressed upon their rear. Lee was fairly caught at Appomattox Station.

War Ends.—The combat was ended. The two great generals came face to face to arrange the surrender. Their thoughts were partly of old days when they had met in Mexico, and they talked as old friends. The beaten general looked like a conqueror. In spite of the hard march, he had kept a fine new gray uniform, which he put on for the occasion. Tall and straight, with his hand on the hilt of his gilded sword, Lee was the worthy defender of a mighty cause. Yet the plain little round-shouldered man, without a sword, clothes and boots splashed with mud, had crushed the cause for which this leader stood.

By the light of the camp-fires, that evening at Appomattox, the regimental bands of the Union army played "Home, Sweet Home." There were still Confederate armies in the field, but all knew that Lee's overthrow marked the real end of the war. When Grant came to

Washington, a few days later, the people hailed him with wild joy. In the evening there was a grand display of fireworks. The President and Mrs. Lincoln took General Grant and his wife in their carriage to watch these signs of victory, and as they rode along, from the crowd rose deafening cheers, three times three for Lincoln and Grant.

"Attend the theatre with us this evening," urged the Lincolns the next day, but Grant and his wife declined. Two of their children were at school at Burlington, New Jersey, and the parents were anxious to see them. General and Mrs. Grant took the evening train north. At Philadelphia the telegraph flashed them the news that Lincoln had been shot. If Grant had sat beside the President, would not two great men have fallen instead of one?

Head of the Nation.—Now for a time Grant almost took Lincoln's place in the hearts of the American people. The nation wished to show him honor. At every great celebration in every great city of the United States, Grant's presence was desired. His friends in Philadelphia had already given him a house; now his old friends in Galena presented another to him. The West Pointers were overjoyed when Grant came back there to see his son Fred, who had become a cadet like his father. President Andrew Johnson, who took Lincoln's place, sent Grant through the South, to see how the Southerners felt about the Union, and even there Grant was received with respect and gratitude for his gentleness to a beaten enemy.

President Johnson and the Congress fell into a bit-

ter quarrel about the proper way to treat the states that had once been Confederate. The President did many unwise things, and it was soon seen that he could not hold the office again. "Grant for President!" rose the call. For more than a year Grant had nothing to say when he was asked to come forward as a candidate. The story goes that it was his wife who influenced him to accept at last. She was proud to think that her husband, once thought a failure, might fill the highest office in the land. He received a large vote, and President Grant sat in the White House.

For eight years Grant held the post of the nation's head. They were not truly happy years, nor were they easy. The war had left both North and South in a bad condition. The nation had so many great things to watch that it could not attend to the small ones. Contractors and bad politicians grew rich at the nation's expense. Public office was not considered as a chance for good service, but as a chance to grab money. The South was a nest of trouble. The whites tried to keep the blacks out of their rights; when the blacks got into power they tried to crush the whites. Violence and bloodshed were common.

People blamed the President for many things. They said he appointed too many of his family and his wife's relatives to good offices. They said that any one of Grant's old friends could "shut the President's eye up" and be safe in making money by crooked means. They said that Grant had no skill in picking out good men to run the government. Much of their blame was true. It was a careless time. Grant was no business man.

He had not run after the Presidency, because he did not feel that he was experienced in politics. He was just a plain soldier; he did the best he could; but in truth, whether it was his fault or not, this great general did not make a great President. One thing, however, was seen by all—Grant himself was an honest man.

A Well-Earned Vacation.—Grant was more glad to leave the White House than he had been to enter its doors. He had been in the public service for sixteen years at a stretch, and he had earned a vacation. The old wish of Grant's boyhood days had been to become "a traveled man." In truth, since that time, he had seen most parts of his own country and much of Mexico; but now his plan was to circle the globe. A rich friend, learning of Grant's plans, sent him a check for fifty thousand dollars, to be used for expenses. The trip cost all that and more.

It was more than two years later, when Grant at San Francisco again set foot upon his native soil. During his absence he had seen every country of Europe and had visited India, China and Japan. Everywhere, this great visitor from the democracy across the seas had been received with almost royal honor.

Nowhere, however, had the delightful journey given him joy unless Julia Grant had been close by his side. People smiled, but approved, when they noticed that if in carriage or in railroad-car any one else sat by Mrs. Grant, the General's ride was spoiled. The woman who believed in him when his own father and brothers sneered was the one woman for Grant.

The people welcomed back Grant joyfully. His

political friends brought forward his name as candidate for a third term as President. But, because of the general feeling that no man should set aside the example of Washington with regard to that high office, Grant was

GENERAL GRANT'S TOMB, RIVERSIDE DRIVE, NEW YORK

beaten, and General Garfield became the leader of the party.

Ward, the Rascal.—Grant now made his home in New York, and went into business with a broker to whom his son, Ulysses, Jr., introduced him. The new firm of Grant and Ward seemed wonderfully successful. With

the famous name of Grant to give him credit, Ward seemed to be making millions for the General and himself. Grant, who understood so little about business, trusted Ward absolutely. Then, in 1884, came the crash. Ward's dealings had been frauds. Grant arrived at the Wall Street office one day to find Ward gone and everything in confusion. When the truth burst upon him Grant wasted no words in complaint. "We are all ruined here," he coolly announced to the friends who hastened in. Ward was later sent to the penitentiary, but that did not bring back Grant's money. Nearly every penny which he owned had been swept away.

But another blow fell. Immediately after his business failure his throat began to give Grant pain. When he consulted the doctors, they pronounced it cancer, probably brought on by his excessive smoking. Month by month the pain grew keener. No cure was possible. In the midst of the General's suffering, a publishing firm, of which Mark Twain was a member, offered him good terms if he would write the story of his life. Such a task was not to Grant's taste; but here he saw a chance of leaving to his loved ones, whose money through him had been lost, a small fortune. He signed the contract and began his "Memoirs."

With set purpose like that with which he had pressed on toward Richmond, Grant pushed forward his writing. Each day he dictated as much as his throat would allow, then spent his time in arranging fresh material for the morrow. Congress voted that he should be restored to his old rank and salary as a re-

tired general, and President Cleveland made it his first business in the White House to sign Grant's new commission. But although this provided money for his present needs, it did not remove the reason for finishing the book.

Several times it seemed as though the "Memoirs" would never be completed; several times the doctors thought that Grant was dying; but Grant intended to fight to the last. "I want to live and finish my book," said he. In the struggle with Death, though Grant was sure to lose at last, his purpose was to win this one battle.

Suffering pain almost unbearable, without complaint he labored on. When his eaten-away throat could stand it, he dictated. When speech proved impossible, he wrote on a tablet. At last the thrilling story of his career down to the end of the war was done. There he wished to let it rest. The only record he cared to leave was that of his soldier life.

Only a few weeks of life remained. Night after night he spent sleepless, tortured with pain. All the tributes which the people of America showered upon him could not cure him. On a summer morning of 1885, his long suffering ended. He had fought his last fight.

Amidst the salutes of cannon from warships moored in the Hudson, his body was laid to rest in New York. To-day, high above the North River, a beautiful tomb, built like a temple, covers the open vault where lies his granite coffin beside that of his wife. As reverent visitors look down into the vault, they give fresh honor to

the plain soldier whose highest purpose was to bring America peace within her borders and make her a reunited nation.

FOR DISCUSSION AND LIBRARY WORK

1. What was Grant's opinion as to the justice of the quarrel between the United States and Mexico? Give reasons for your opinion.
2. Find out two special services performed by Grant in the Mexican War for which you think he deserved honorable mention.
3. What other celebrated Americans served in the Mexican War?
4. Why has the road over the Isthmus of Panama ceased to be fever-haunted?
5. In the lives of what other Americans do we find apparent failure turned into success?
6. Write a short dialogue which might have taken place between Lincoln and Grant at City Point.
7. What terrible scenes occurred in Richmond when the Confederate defenders left the city?
8. Find some interesting experiences of General Grant on his trip around the world.
9. Compare Grant's death with that of Lincoln.

JAY COOKE
1821–1905

THE BANKER OF THE CIVIL WAR

"No man can stand in this country who throws the slightest discredit upon the national faith and honor."—*Letter to his brother Henry.*

The Little Sandusky Storekeeper.— While De Witt Clinton's Erie Canal was being built, Mr. Cooke, a well-to-do young lawyer from Clinton's own state, traveled to the newly-settled northwestern part of Ohio. In the town of "Ogontz Place," on Lake Erie, Mr. Cooke built his new home on the very spot at which the old Chief Ogontz had pitched his tent before selling his land to the white settlers. The name was soon changed to Sandusky.

The chief on his frequent visits to his old home slept in Mr. Cooke's barn and ate at Mrs. Cooke's kitchen table. Many a merry "pig-a-back" ride did little Jay have on his broad shoulders, and many an Indian tale he told the lad. The boy learned to fish from an Indian canoe and to handle a rifle like an Indian expert. His love of the great outdoors was thus early implanted.

But with his uncle young Jay learned to love also an indoor occupation: that was store-keeping. He was given a corner of the store window, and when only ten years old he laid in his own stock of picture books and small tin toys. By selling these at a gain he made his

spending money. At the end of four years he thought himself an experienced merchant.

Jest and Earnest.—One day Mr. Cooke sold his home at a good profit. With serious face he said to his sons, Jay and De Witt, "Well, boys, you will have to go to work now, for we have no home." Fourteen-year-old Jay, not seeing the twinkle in his father's eye, took the jest for earnest. Without a word he cut school and found work the next day in a store like his uncle's. Ten days later his father found out what he had done, but he decided to allow the lad to continue his work.

Portrait by Oberholtzer

JAY COOKE

During the next three years Jay was employed in stores in Sandusky and St. Louis. His employers liked this tall, slim young man with light brown hair and blue eyes. Active, intelligent and sunshiny, he was well fitted by the old saying, "Smart as a steel-trap and quick as lightning." His success won him an invitation from his brother-in-law to go to Philadelphia as clerk for the "Washington Packet Line."

From Packet Line to Banking House.—Jay found the Quaker City a bustling, stirring place. There was

plenty of excitement both in and out of business hours. The various "packet" lines which used the new railroad and canal route between Philadelphia and Pittsburgh carried on a bitter rivalry for freight and passengers. Even an energetic fellow like Jay found his duties hard and his days long. He was in the office at Third and Chestnut at five in the morning, and left at eight in the evening.

Exciting events took place at night. Slavery troubles were in progress, and Jay wrote home, "Fires and murders, mobs and abolition squabbles are every-day occurrences." He saw the burning of Pennsylvania Hall on the night when James and Lucretia Mott so nearly lost their home and perhaps their lives.

The packet line finally failed. The owners left Philadelphia to escape arrest for debt. Jay remained sad and idle in the deserted office, far from home, with no one to pay his wages. The proprietor of Congress Hall, a big hotel at the corner next to the packet office, noticed the young man. He offered him a job as bookkeeper in this big hotel. Jay gladly accepted this new opportunity. It is well that he did, for only two doors away was a prosperous banking house which was run under the name, "E. W. Clark and Company." The bankers, Mr. Clark and Mr. Dodge, soon noticed the new clerk in the hotel. They liked his looks and ways. After observing him for a time, they offered him a good position in their banking house. In a few weeks, Jay Cooke was one of their most trusted clerks.

Jay, not yet eighteen, had fallen into great good fortune. His employers were men of honesty and fine

ability. As the boy grew familiar with banking, he took many small affairs on his own shoulders, leaving the bankers free for larger matters. While this pleased the gentlemen, Jay soon proved that he was capable of helping, too, in important ways. When twenty-one, Jay was presented, as a New Year gift, a one-eighth partnership in the business. He had indeed won the hearts of his employers.

Although busier than ever, Jay found time to write nearly every day to his promised wife, Elizabeth Allen, of Kentucky. He had so much to say to his "Libby" that the postage often cost seventy-five cents, for in 1843 people had to pay twenty-five cents per sheet. But he considered the postal service was worth the price.

A year and a half later, through the beautiful September weather, the young banker drove leisurely all the way from Kentucky to Philadelphia. Seated by him in the comfortable carriage was his bride. They were driving to their new home in handsome rooms above the Clark banking-house.[1]

Out of Business and in Again.—The next fourteen years were full of quiet steady success. As a banker and broker, Jay Cooke had a good chance to make money. When at thirty-six he retired, it was with a fortune of $150,000. At his new home on Old York Road, "The Cedars," he had a fine vacation, spending all the time he wished with his wife and children. In summer he hunted, fished and camped in the great out-of-

[1] Later Mr. Cooke bought from Mr. Clark a house at 904 Pine Street and there made his home.

doors. Thus he built up strength without which he could not have done the work of the next few years.

But Jay Cooke was a real American, and, after his play-time he was eager to work. At the beginning of 1861 he returned to the banking business. He hung out his sign at 114 South Third Street, next door to the old bank of Stephen Girard. This was a fitting place, for "Jay Cooke and Company" was to become as famous as was Girard's name fifty years earlier.

The new banking-house soon had a chance to help in the Civil War. Much money was needed for war expenses. Three million dollars' worth of bonds were to be sold in Pennsylvania alone. "They must be sold at a discount," the old bankers said. Jay Cooke declared: "Not so. What we need now is not money-making, but patriotism." He then sent out agents to every bank to pass along the word, "Help Pennsylvania and you will help the United States. Buy bonds." The banks took up the slogan, and the people bought all the bonds at full face value. Governor Curtin wrote Jay Cooke a letter of thanks for raising such a great sum.

More Government Bonds.—President Lincoln's Secretary of the Treasury, Mr. Chase, found it hard to secure all the money needed to carry on the war. The rich men were slow to buy bonds. Jay Cooke said to his brother, "Tell Governor [2] Chase, I hold myself at his service and, pay or no pay, I will do all I can to aid him." This made Secretary Chase and Jay Cooke warm friends. When Cooke heard of the terrible defeat at

[2] Salmon P. Chase had been governor of Ohio.

Bull Run, he went at once to the offices in the center of his city. In a few hours he secured subscriptions for $2,000,000, showing that the people still had confidence in the Government.

Two million dollars would pay war expenses only two days. Secretary Chase next called on the bankers of New York, Boston and Philadelphia. After raising the sum of $50,000,000, one of the leading men told Mr. Chase that he could depend on them for no further aid. But Jay Cooke, when he heard this, said, "Mr. Chase, I believe I can sell government bonds direct to the people." He became at once the Secretary's right-hand man. He advertised in the newspapers and sent agents all over the North; subscriptions for bonds came pouring in.

Fifteen hundred banks and special agents sent regular contributions through the Third Street Bank. Thirty clerks were kept busy there on this business alone. Jay Cooke, like Franklin, brought his message home to the people through clever little articles in the newspapers. After reading "The Best Way to Put Money Out at Interest" and "An Hour at Jay Cooke and Company's," men and women decided to be both patriotic and thrifty by investing in government bonds.

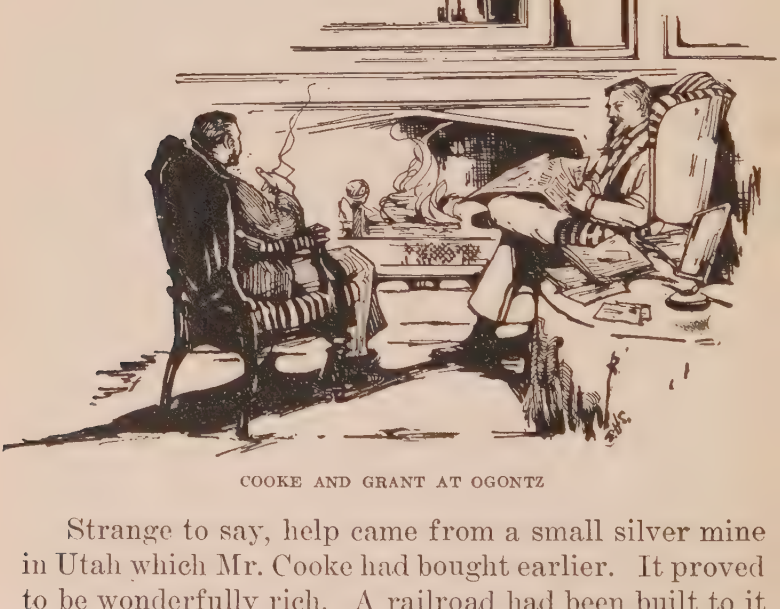
"It was not in the field the Yankees whipped us," said a Confederate leader, "it was in the Treasury Department." This was the truth. Had the North failed to supply its men with money and munitions, Grant could not have won his victories. Jay Cooke's energy and his belief in the people made the financial side a success. His whole heart was in the work.

His hand-shake made glad the person who bought a fifty-dollar bond, but his glance of anger brought terror to the rich man who failed to buy as he should. "I do not like Meester Cooke," said an old French banker in Philadelphia; "he take me in a room; before I go out, he make me do what I wish not to do." Jay Cooke was a power in America. A Boston editor wrote of him, "The 'Company' in Cooke's firm is made up of the American people."

While the great banker received a very small rate of profit on each bond, yet he sold so many bonds that he earned a large sum of money. He decided to build a new home, which was to be called "Ogontz," the name of the old friend of his boyhood. The very day the Union troops entered Richmond, the first spadeful of earth was dug for the new mansion. Returned soldiers were selected to do the work; all materials were bought from within the United States and mostly from near Philadelphia. Thus many Americans were benefited by the million dollars spent on the palace, with its fifty-two rooms, and its broad stairway ornamented by a great bronze bust of "Ogontz." At the "house-warming" there were five hundred guests. During the next few years many distinguished visitors came to Mr. Cooke's home. Often President Grant sat by the cheery fire, and, enjoying Mr. Cooke's famous Cuban cigars, held interesting chats with his host.

Clouds and Sunshine.—The great banker next took up the task of financing the building of a railroad from the Great Lakes to the Pacific Ocean. This Northern Pacific Railroad from Duluth to Tacoma proved too much of a

task. Mr. Cooke failed. Like Robert Morris, the banker of the Revolution, his money, with that of the many people who had put their money into the plan, was all swept away. While he was not sent to prison, yet his beautiful home and its costly furniture was sold at auction.



COOKE AND GRANT AT OGONTZ

Strange to say, help came from a small silver mine in Utah which Mr. Cooke had bought earlier. It proved to be wonderfully rich. A railroad had been built to it so it could be worked well. The income from that mine, and the million dollars received through its final sale, enabled the banker to pay back many of the people who had lost through his advice, and also put him on his feet again. It was a glad day for Mr. Cooke and his family when he bought back "Ogontz."

But really the place was too big and expensive to live in, so Mr. Cooke rented it out as a young ladies' school. He loved the place and visited it often, but he did not enjoy the mere show of living there. At sixty years of age he preferred to spend much of his time once again in his beloved great out-of-doors.

For twenty-five years longer the rich man enjoyed life. All knew and loved the kind old man with his white beard, broad-brimmed hat, and long cloak, as he passed around playing Santa Claus to the neighbors along the Old York Road. He was the good spirit of the countryside, and when at the age of eighty-two his body was borne to the marble tomb at "Ogontz," he was deeply mourned. The nation linked his name with that of Morris, the "Banker of the Revolution," and with that of Girard, the "Banker of the War of 1812." But the people of the little town of Ogontz called him by the loved name "Neighbor."

FOR DISCUSSION AND LIBRARY WORK

1. What other famous American leaders were store-keepers in their youth?
2. Describe a trip on a canal packet-boat.
3. How did Jay Cooke's letters to Elizabeth Allen differ from ours as to envelopes and stamps?
4. Compare the expenses of the Government during the Civil War with its expenses during its share of the Great War.
5. Was the interest on the Government bonds sold by Jay Cooke greater or less than that on our Liberty Bonds? What was the reason?
6. Name three railroads which cross the Rocky Mountains. At what important cities do they begin and end?
7. In what ways did the business failure of Jay Cooke resemble that of Robert Morris? How did it differ?

ROBERT EDWARD LEE
1807–1870

CHIEF OF THE GRAY

"Do your duty in all things. You cannot do more; you should never wish to do less."—*Letter to his son.*

I. UNSELFISH SERVICE

Robert Lee and the Greatest Virginian.—"First in war, first in peace, first in the hearts of his countrymen"; these famous words we owe to "Light Horse Harry" Lee, a gallant cavalry officer during the Revolutionary War and a personal friend of the "Father of his Country." "Light Horse Harry's" Virginia home, "Stratford," stood near the Potomac, only a few miles from Washington's birthplace. In the year when the *Clermont* made her first voyage up the Hudson, there was born at "Stratford" a son Robert.

ROBERT EDWARD LEE

Robert's early life was closely connected with the memory of noble Washington. He heard from his father many stories of the great leader. When Robert

was still very young, the Lee family moved to the old town of Alexandria, on the Potomac, below the nation's capital. There the Lees attended the very church in which Washington had worshipped. Robert was often taken to Mount Vernon. His father and mother also took him frequently to visit Arlington, a beautiful mansion standing on a wooded hill across the river from the city of Washington. There lived George Washington Parke Custis, the son of Martha Washington. When little Mary Custis and Robert were tired of play they would roam through the house, looking at the many relics of Washington which it contained. The boy learned to love and admire the character of Washington: as he grew up, he, like Grant, took that great man as his pattern.

In His Mother's Service.—When Robert was only eleven, his father died. Though Mrs. Lee could still keep her few negro servants, she was left with an income so small that she had to economize. Her health failed, and she became unable to walk without help. As his sister Mildred was too young to assist her mother much in housekeeping, the burden fell upon Robert's shoulders. He went to market, carried the keys of the home, and saw that the slaves carried out, in house and stable, his mother's directions.

As Robert grew older he took even greater care of his invalid mother. "You have been both son and daughter to me," said Mrs. Lee. Instead of staying after school to talk or play with the other boys, every pleasant day found Robert hurrying home to accompany his mother on her ride in the old family coach. He

supported her steps to the carriage, arranged the cushions in the most comfortable way, and chatted pleasantly during the drive to keep Mrs. Lee amused.

Yet no one could call Robert a "mollycoddle." The tall handsome lad loved fun and sports as much as his mates. When he visited his relatives in the country, he often followed afoot the galloping fox-hunters. By cutting across the fields he usually managed to keep them in view, and with strong legs and good lungs he ran thus for hours at a time.

The Cadet and Mary.—No "mollycoddle" would decide to be a soldier, but that was the life Robert chose. To prepare himself for entrance to West Point, Robert attended for a year an academy in Alexandria. The next question was, how to get into West Point. Mrs. Lewis, the sister of Mr. Custis of Arlington, came to Robert's aid. With him she drove to Washington, called at the White House, and introduced her young friend to President Jackson. That old fighter looked Robert over, was pleased with his manly appearance and good manners, and readily gave Robert the desired appointment.

At West Point Robert became known as one of the best cadets. He neither drank, smoked, nor swore; and he studied with a will. Ulysses Grant, fifteen years later, received many demerits, though he was not at all a bad fellow; but Robert Lee during the entire four years of his course got never a one. This was not due to any lack of spirits, for on his furloughs home he was as great a tease and fun-maker as could be found. All the girls at the parties admired Robert. In gray

uniform with white buttons, this trim cadet with the brown eyes and curling brown hair was indeed a fine-looking partner, and as interesting as he was handsome. But Robert's attention centered on one girl, Mary Custis, and she delighted in his company. Mary's father objected. Lee was poor, while Mary would

BIRTHPLACE OF ROBERT E. LEE

inherit a fortune. At last, seeing that Mary's heart was fixed, Mr. Custis yielded.

Robert graduated second in his class. The "honor men" were then selected as engineer officers, so an engineer Robert became. He helped in fixing the boundaries of state lines, in making dikes along the Mississippi, and in building Fort Hamilton. After two years of

such work, having made a good reputation for himself in his profession, he returned to Arlington and there was a fine wedding. As the years went on, Lee's important engineering work called him to various parts of the country. Sometimes he was able to have his wife and his growing family with him, but in any case they managed to spend Christmas together at Arlington.

A Distinguished Officer.—At last the Mexican War called Lee away from his own country. Under the command of General Winfield Scott, Lee, now a captain, laid out the route of the army, improved the roads, scouted to find the location of the enemy's troops, and made fortifications in time of battle. Often his life was in danger; in one battle, indeed, he was wounded; but his bold active spirit made light of that. General Scott saw the value of Lee's services. At the end of the war Lee returned from Mexico a colonel.

After a time Colonel Lee was made superintendent of West Point. At forty-five he came back to the place he had left when he was twenty-two. Then he had been an inexperienced young lieutenant with his reputation still to gain; now he was a distinguished officer, admired by all. The cadets looked up to him with respect and affection. His own son, Custis, was a cadet under his charge.

The three years spent inside the Academy walls were quite long enough to satisfy Lee, who had had so many different experiences in the open field. Next he became colonel of a cavalry regiment in Texas. That was a rough, wild life. Colonel Lee chased fierce Comanche Indians and roving Mexican bandits. "I hope you

enjoyed your usual celebration of the Fourth of July," he wrote one year to his wife. "Mine was spent, after a march of thirty miles, under the shade of my blanket which I had spread on four sticks. The sun was fiery hot, the air like the blast of a furnace, and all the water brackish. Still, my loyalty to my country and my faith in the future continue as ardent as ever."

While Lee was riding over the Texas plains, the storm of war was threatening our country. Lee sorrowfully saw the clouds gathering. "How the spirit of Washington would be grieved if he could see the wreck of his mighty labors!" he wrote to his son. Lee admitted that slavery was evil. He had already set free the few slaves whom he had inherited long since from his mother, and the negroes that Mary Lee had received at the death of her father were soon to be freed also. Yet Lee saw that to destroy slavery at one blow would overturn the whole life of the South. How could the North and the South peaceably settle their differences? Lee did not know; there was in truth no answer.

When the final break came, Lee had been called by General Scott to the city of Washington. "Leave no stone unturned to secure Robert Lee to our side," the old General advised Lincoln. "He would be worth fifty thousand men to us." Lee loved the Union. He believed that it was intended to last forever. But, like most of the great men in Washington's day, he considered that his duty to his own state should stand above his duty to the Union.

General Scott, who was now commander-in-chief

CHARLESTON MERCURY

EXTRA:

Passed unanimously at 1.15 o'clock, P. M., December 20th, 1860.

AN ORDINANCE

To dissolve the Union between the State of South Carolina and other States united with her under the compact entitled "The Constitution of the United States of America."

We, the People of the State of South Carolina, in Convention assembled, do declare and ordain, and it is hereby declared and ordained,

That the Ordinance adopted by us in Convention, on the twenty-third day of May, in the year of our Lord one thousand seven hundred and eighty-eight, whereby the Constitution of the United States of America was ratified, and also, all Acts and parts of Acts of the General Assembly of this State, ratifying amendments of the said Constitution, are hereby repealed; and that the union now subsisting between South Carolina and other States, under the name of "The United States of America," is hereby dissolved.

THE

UNION

IS

DISSOLVED!

NEWSPAPER POSTER ANNOUNCING THE DISSOLUTION OF THE UNION

of the army, was too old to conduct the war. He knew he would be compelled to resign, and he recommended Lee to fill the place. President Lincoln was ready to give the post to Lee, but Lee's answer came: "I am opposed to secession, I dislike the idea of war, but I cannot take part against the Southern states." General Scott begged Lee to change his mind, but Lee's conscience pointed out only one road. "I am compelled to do as I do," he replied. "I cannot consult my own feelings."

Had Lee been a selfish man, he would have joined the side of the North. He would have been commander of all the powerful Union armies. What an honor that would seem! But Lee could not act selfishly; that was not in his nature. He returned to Arlington and asked to be left alone for a time. His wife heard him in an upper room pacing back and forth in anxious thought. At last he came down. "Well, Mary, the question is settled," he said. "Here is my resignation from the army." The North had lost a great leader.

That resignation meant trouble, poverty, danger. Though Lee did not know it at the time, Virginia had already decided to leave the Union. As soon as the Governor of Virginia learned that Lee had resigned, he asked the legislature to make Lee a general and the commander of all the Virginia troops. This was passed without a vote against it and Lee was called to Richmond, where he accepted the position.

Soon the Confederate Government took the appointment of generals out of the hands of the states, and Lee was one of five generals who were to command

armies. He was sent to the mountain region of Virginia (now West Virginia) to drive out the Union troops. Lee's military honors had been gained in the mountains of Mexico; yet in the West Virginia mountains he secured no credit. The Federal soldiers were not driven out, and in the end, West Virginia separated from Virginia and became a Union state.

The cry against Lee was loud. Some of the Southern newspapers wanted President Jefferson Davis to remove Lee from any command. They said the "E" in his name stood for "Evacuating."[1] Lee could have made many excuses; he could have blamed the rain, the lack of horses, the weariness of his men, the failure of some officers to obey; but like Washington he preferred to say nothing in his own defence. "It is better," he said, "to go steadily on in the discharge of my duty to the best of my ability." Like the great General Washington, Lee had apparently failed in his first campaign.

II. DEFEAT WITH HONOR

Lee Gets His Chance.—In spite of the blame which was heaped on Lee's head, Jefferson Davis believed in him. Lee was given charge of building forts along the southern coast; afterward President Davis kept Lee at his side in Richmond; but for nearly a year General Lee was a general without an army. No doubt he grieved over being thus set aside; at any rate, his hair turned silver during that time, though his movements were as quick and his dark eyes as keen as ever.

[1] "Evacuating" means giving up.

Through the warm May days of 1862 the Union forces pressed slowly but steadily toward Richmond. At last the great blue army lay only six miles from that

GENERAL LEE ON "TRAVELLER"

city. The Federal soldiers could hear the Richmond church-clocks striking the hour. "We shall soon be there," they said.

General Johnston, the Confederate commander, was badly wounded, and President Davis put Lee into Johnston's place. It was a critical time. The Southern

officers were discouraged and disheartened. They had no confidence in Lee. When their new general called them together in council the officers said with one voice, "The Yankees are too strong for us. Let us retreat a little nearer Richmond. We cannot hold them back here."

Lee made no answer until he had looked over the battle-line. Then, in face of the objections of his officers, he decided, "The enemy is near enough to Richmond. We shall not move back a step. Instead of waiting for the Federals to attack us, we'll attack them." Some of the officers were offended because Lee did not take their advice, but the private soldiers thought, "This general suits us." After this, whenever they spied white-bearded, snowy-haired Lee riding along the lines, they raised a hearty cheer.

The Gentle Soldier.—Boldly Lee attacked the outnumbering enemy. They gave way under the fierce assaults, and for seven days retreated from one position to another. General McClellan did not finally halt until he was fifty miles away from Richmond, with the Union gunboats on the James River at his back. "If it were anybody but you who had planned such a daring attack," wrote Jefferson Davis to Lee, as the fight began, "I would countermand it." The Union soldiers had fought bravely, but Lee had outgeneraled their commander. Amazed, McClellan believed that Lee had more than twice as many men as he actually possessed. President Lincoln changed generals. It was almost three years before any Union army once more caught sight of the spires of Richmond.

At the end of that summer, the name of Lee was dreaded by the Union commanders. He had defeated them again, and the Southern soldiers for a few days looked across the Potomac at the dome of the Capitol in Washington. From his office in the White House President Lincoln saw the "rebel" flags floating in Virginia. The spirit of the Confederates had changed They were full of confidence in their leader. When he appeared, mounted on his "Confederate gray" horse, "Traveller," every one hurrahed for "Marse[2] Robert."

In truth, Lee was worthy to be a king. His men believed in him because of his victories, but they loved him because of his noble character. In Lee they saw a representative of the best men of the South. "His graceful, knightly bearing, his eagle eye, and the very expression of his face, all betokened mingled firmness and gentleness," said one who knew him well. Lee was often called "the gentle soldier." He could be determined enough when necessary, yet his heart, like that of Lincoln, was tender.

"What a cruel thing is war," wrote Lee one Christmas day in his tent, "to separate and destroy families and friends, to fill our hearts with hatred instead of love for our neighbors. My heart bleeds at the death of every one of our gallant men." He never ordered even a spy to be put to death. When his generals made mistakes he took the blame upon himself. Instead of seizing upon comfortable houses for his headquarters,

[2] "Marse" is the negro way of saying "Master."

Lee usually slept in a tent and left the homes undisturbed. During one of his fiercest battles he observed the enemy from a little hill. The enemy observed him also and fired sharply upon him and his officers. While the bullets were whistling about, Lee saw at his feet a young bird which had fallen out of its nest. Lee stooped, picked up the bird and placed it safely on a branch of the nearest tree. His horse "Traveller" answered to his master's mere whistle. Great heart and great mind combined in the great soldier to make a true man.

High-water Mark.—To keep the enemy away from Richmond, Lee invaded Pennsylvania. Those rich fields, big barns, comfortable houses and well-stocked stores of the Keystone State offered him a chance to feast his army and refit the needy men. If he could win a battle in Pennsylvania he might be able to make a dash and seize Washington. Then Maryland and West Virginia might join the Confederate states.

The Southerners joyfully followed Lee across the Potomac. Lee on his part was proud of his soldiers. "There never were such men in an army before," he declared. "They will go anywhere and do anything if properly led." But as his sixty thousand fighters marched straight into Pennsylvania, Lee warned them to remember "that we make war only on armed men." Women and children were not to be disturbed. Houses and barns were not to be destroyed. The troops were to be as careful in the country of the enemy as in their own. Could any commander show a more kindly spirit?

General George Meade met the Confederates before Lee could seize Harrisburg. Some of the gray cavalry

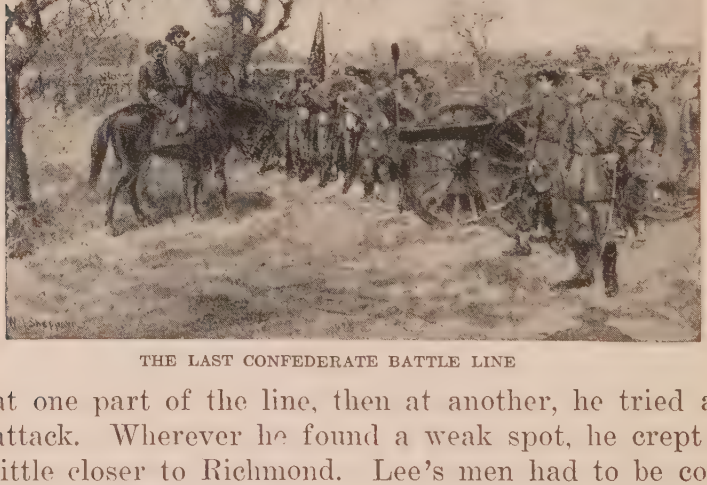
actually reached the banks of the Susquehanna, but were driven back as Meade advanced. The great battle between Lee and Meade took place at the quiet little town of Gettysburg. For two days it continued with some advantage to the Confederates. On the third day, the Southerners posted on one ridge looked across the valley at the Federals who held the opposite hill. "If we don't whip Meade, he will whip us," said Lee. The Confederate guns began a terrible cannonade, but their ammunition ran low. Then fifteen thousand men marched across the valley to storm the Union lines on Cemetery Ridge. It was the turn of the Northern cannon and muskets to blaze. The Confederates were blown away like smoke before the wind. "Pickett's charge" had failed, and Lee had lost the battle.

Ebb-tide.—The tide of Confederate strength went down from that day. The defeat at Gettysburg and the capture of Vicksburg struck the South two crushing blows. Though Lee's army was still strong and in good order, his dream of invading the North had vanished. Grant, flushed with victory, came from the West to grasp Richmond as he had taken Vicksburg.

Now Lee was on the defensive. The South had put almost every able-bodied man into her armies. When those were gone, there would be no more. Grant knew this, and forced the fighting. He could wear out Lee's army. Yet time after time Lee fought him to a standstill. The sight of their beloved leader always roused the gaunt, hungry Confederates to the highest pitch of bravery. Several times, when a charge was to be made, Lee tried to put himself at their head, but

the men fiercely cried out, "Go back, General! Get out of danger!" They even seized "Traveller's" bridle and dragged him away.

Finally Grant gave up "hammering." The slaughter of his men had been frightful. He had reached so near Richmond that he built great fortifications half around the city. Now he "nibbled." First



THE LAST CONFEDERATE BATTLE LINE

at one part of the line, then at another, he tried an attack. Wherever he found a weak spot, he crept a little closer to Richmond. Lee's men had to be constantly on the watch. In their trenches through those winter months of 1864 and 1865, they received only about one-fifth of the rations which the Union soldiers drew. Some of the men on the coldest days had to stay in battle-line for three days, with scant diet and thin clothing, while the sleet beat upon them. They perished fast from exposure and hunger.

Appomattox.—Lee was now made commander-in-chief of all the Confederate armies; but it was an empty honor. From no other Southern force could Lee get help. He had not enough troops left to hold Richmond. We know how he retreated from burning Richmond with his starving men. In their hunger the soldiers gathered up the scattered grains of corn where the artillery horses had been fed. Still the troops looked to "Marse Robert" to rescue the army and carry on the fight. It was impossible. When Lee surrendered at Appomattox the war was done.

As Lee rode back to his remaining men after the surrender, they crowded around him, loyally trying to show their sympathy, anxious to touch him or even "Traveller." With a trembling voice Lee spoke: "Men, we have fought through the war together; I have done my best for you. My heart is too full to say more." Thus with sad but kindly words he bade farewell to his gallant troops.

"Oh, General," exclaimed one of his officers, "what will history say of the surrender?" "That is not the question," answered Lee. "The question is, is it right?"

Back to Richmond rode Lee, no longer a soldier. As he passed through the streets of the partly-burned city the people cheered him and waved their hats and handkerchiefs. General Lee silently took off his own hat in response and rode on to the house where his family waited for him. Not long was he allowed to enjoy their company undisturbed, for he was soon tried for treason. General Grant strongly objected, and the

trial came to nothing. Had Lee been hung or even imprisoned, one of the most powerful speakers for a true peace between South and North would have been silenced.

For the Future of the South.—Lee was poor. The home at Arlington had been seized by the Government. Another house owned by Mrs. Lee had been burned by the Northern soldiers. There was nothing left. But offers came from all directions. Some admirers in England asked Lee to come across the ocean, and they would provide for him wealth and a country estate, but he refused. Other friends begged him to be a candidate for governor of Virginia.

The only offer that Lee would accept was a call from a little college at Lexington, in the Virginia mountains. Washington had left money to it, and in his honor it was named Washington College. The trustees asked Lee to become its president. Instead of a high salary he would receive fifteen hundred dollars a year, but Lee gladly took the position. Perhaps the very name of Washington influenced him somewhat. "I hope to be able to do something for the young men of the South," he said. "In education lies our hope."

When Lee rode on old "Traveller" into Lexington, he found at the college four professors and forty students; but his coming changed that. The famous name of Lee made the little college famous. Students flocked thither from all parts of the South. In peace as in war Lee was a great leader. "I have led the young men of the South to battle," declared he. "I have seen many of them die on the field. I shall devote my

remaining energy to training young men to do their duty in life."

"Duty" was Lee's watchword for himself and for others. For five years he worked faithfully and well to build up a college whose graduates should be honorable and intelligent and should do their duty. When in 1870 this noble gentleman died, as a fitting honor the name of the college was changed to Washington and Lee University, and his body was laid there to rest.

Could Lee live to-day, he would be joyful to find that the old bitterness between North and South has almost passed away, and he would rejoice in the New South, which has grown so prosperous. Virginia may well be proud of her two great leaders, Washington and Lee, great in war, great in peace, and truly great in the hearts of their countrymen.

FOR DISCUSSION AND LIBRARY WORK

1. How did Grant's appointment to West Point differ from that of Lee?
2. What are the facts about Lee's daring trip by night across the Mexican lava-fields?
3. How did Colonel Lee capture John Brown at Harper's Ferry?
4. Did most of the battles of the Civil War take place on Virginia soil?
5. Was Lee justly blamed for his failure in West Virginia?
6. Compare Lee's kindness to the little bird with that of Lincoln to animals.
7. Draw a map of the opposing armies at Gettysburg.
8. Which was the greater general, Grant or Lee?
9. Would it have been right to try Lee for treason? Why?
10. What became of Jefferson Davis, the Confederate President?
11. What famous Americans besides Lee have been college presidents or professors?

GROVER CLEVELAND
1837–1908

A FEARLESS PRESIDENT

"The nation's strength is in the people; the nation's prosperity is in their prosperity."—*First annual message to Congress.*

I. HARD WORK DOES IT

The Minister's Son.—Shortly before Ulysses Grant started off for West Point, there was born in Caldwell, near Newark, New Jersey, a boy named Grover Cleveland.[1] Grover's father was a country minister, whose good service brought but small pay. "He was a real hero," often remarked Grover in after-life. "He brought up nine children in comfort, and gave each of them a fair education; yet his salary never exceeded a thousand dollars a year. He had the pluck which has made America great."

GROVER CLEVELAND

When Grover was four years old, Mr. Cleveland took charge of a church near Syracuse, New York. That part of the state was still thinly settled. Syracuse, now such a large city, was then only a village. It was a roundabout road which the Cleveland family traveled to reach their new home, but it was easy, for it was mainly on water, along the Hudson River and the new Erie Canal.

[1] Cleveland's full Christian name was Stephen Grover, but he dropped the Stephen before he became twenty-one.

For twelve years Mr. Cleveland was a religious leader in central New York, but he died when Grover was sixteen. Grover, now a tall young fellow, so serious that he seemed almost grown up, had been expecting to go to college. That plan, however, had to be given up because of his father's death. Every dollar left by Mr. Cleveland was needed to support the mother and her daughter. Off went Grover to New York City, where his oldest brother had secured for him a position as clerk in a school for the blind.

Determined to be a Lawyer.—Although deprived of a chance to attend college, Grover knew that any one can get an education in this country if he will work for it. So earnestly, therefore, did he devote his spare time to study, that his friends said, "Take care you don't injure your health." His hope was to be a lawyer, and as a preparation he made history his chief subject. Quiet and modest, but very determined, Grover Cleveland was a young man who seemed sure to make his mark in the world.

After a year in the New York school, Grover returned home, but there he could find no worth-while work. Many people at that time were leaving the neighborhood for Ohio, which the Erie Canal was opening to business. There came into Grover's mind a fancy that in the rising town of Cleveland, named after one of his ancestors, fortune would smile upon him. Filled with this thought, the eighteen-year-old boy borrowed twenty-five dollars from a friend, and started off for the "West."

On his way to Cleveland, Grover stopped at Buffalo

to visit his uncle, Mr. Allen. This prosperous uncle raised many fine cattle, and was preparing a register of such stock. This register or year-book had to be kept up-to-date, which meant much work. Struck with Grover's intelligence, Mr. Allen proposed that Grover should stay with him and help him with the book. Grover agreed, and this was the beginning of great things in his life.

Work on the book did not consume all of Grover's time. He was anxious to begin his chosen profession. So, before long, by his uncle's help, he obtained a place in the office of a law firm in Buffalo. At first he received only four dollars a week, but he earned a little more money by assisting his uncle in the evenings with the cattle-book. Thus he was able in those times to pay his expenses.

A Member of the Bar.—After four years, Grover, now grown big and burly, completed his law studies, and was "admitted to the bar." Instead of striking out at once for himself, he took the post of chief clerk which the law firm offered, and stayed four years longer in the same office. While he held this position, the Civil War began. Grover was drafted into the Northern army. One of his brothers was already with Grant, another with Meade, and Grover would have liked to do his share, but he was still needed to help support his mother and his sisters. He finally thought it best to borrow a thousand dollars and with this to secure a substitute.

The next step in Grover's law career came when he was offered the place of assistant district attorney for

Erie County, in which Buffalo was situated. The salary was much less than that which he had been receiving, but the position gave him a chance to gain experience. Some young lawyers would have said, "At twenty-five I am too old to accept a reduction in my salary," but Grover was wise enough to take the post.

The new position gave plenty of work to Grover. He was used to that, however, and his neat, orderly habits enabled him to do much in a short time. Often, nevertheless, he was compelled to work far into the night, and this, too, became a habit. He gained a good name for his industry. At the end of his term he became one of a successful law firm.

Grover's two partners were brilliant men, but he knew more law than they, and was willing to work much harder. Soon he became the mainstay of the firm. He was no great orator, and "smartness" was not in his line, but he was usually the first man at the office in the morning and the last man out of it at night. Every case which he took up was considered with the utmost care. Nothing about it was left to chance. "He honestly bought success with hard work," said one of his assistants.

Along with Cleveland's hard work went an honesty as great as that of Lincoln. Never did he accept money without earning it, and he always did his best for his clients. "Nothing he undertook was slighted; therefore all his work was done well," stated one of his partners. Clearly did he see what was right and just, and he acted accordingly.

The New Mayor of Better Buffalo.—While Lawyer

Cleveland had been gaining success, the city where he lived had been falling into disgrace. It had grown larger and richer as the years passed, but its government had grown corrupt. Buffalo now was so large that its citizens found it hard to keep an eye on public affairs. Dishonest and evil men ran the city's business for their own profit. The money of the taxpayers went into the pockets of the "bosses." The city needed a good cleaning-up.

"You are the man we need at the head of affairs, Mr. Cleveland," said some of the good citizens of Buffalo. Cleveland, deep in his own business, refused; but the call came again, even more strongly. "Yes," said Cleveland at last, "I will run for Mayor if you will first nominate good men for the other offices of the city. I could do nothing, if elected, without honest persons to help me govern." This was done, and Cleveland set out to win the election.

It was then thought that a candidate could not succeed unless he bought votes and "treated" the drinkers in every saloon. Cleveland was not the man to do such things. "Honor and honesty," was his watchword. Unless he could be elected by right means he did not wish to be elected at all. Only one speech did he make. That was at the beginning of the campaign. In the speech he brought out a great thought, which all our officers of government should repeat each day—"Public office is a public trust." Instead of multiplying speeches himself, Cleveland spent his energy in directing his helpers to wake up the voters and to make them think.

Thinking voters always vote for honest officials. Cleveland was elected Mayor. In a short time he became known throughout the state for his efforts to better his city. He saw to it that the streets were well cleaned, lighted and paved, that necessary sewers were built, that all the "superintendents" really superintended the work placed in their charge. The people were getting the worth of their taxes.

Not only did Mayor Cleveland insist upon good work, but he also watched that the public money should not be wasted. "We hold the money of the people in our hands," said he to the City Council. "It is to be used for their purposes and to further their interest. We should be as careful of it as we should be of the money intrusted to us by a special friend." If Cleveland thought any man was cheating the city he said so in plain words.

Governor and President.—Such a strong energetic leader was needed for the state of New York. Cleveland was not looking for such an honor. To the duty just before him he gave his full attention, and he was no self-advertiser. In a year, however, Grover Cleveland, the worker for good government, was elected by a wonderful majority as governor of the most important state of the Union.

Again Grover Cleveland stated his ideas on government. "Public servants," said he, "should constantly bear in mind that they are put into place to protect the rights of the people and to answer their needs as they arise." The same principles which he had carried in Buffalo he carried out in Albany. No more honest,

straightforward, fearless governor ever occupied the Executive Mansion. Three years of such strong, wise leadership for the public good in his state, and Governor Cleveland became President of the United States.

II. HONEST AND TRUE

A Hard-working President.—The people said that Grover Cleveland had risen remarkably fast. He had begun public service at twenty-five; now, at forty-seven, though he had not sought the honor, he was head of the nation. "It is because he has the genius of leadership and the spirit of righteousness," said a prominent man. "What do you mean by a leader?" came the question. "A leader is a man who always knows what to do next," was the quick answer.

No handsome or dashing leader, however, was the new President. There was nothing to attract especial notice in his appearance, except that he was remarkably stout. The crowds at his inauguration saw a plain, tall, bulky man, with a kind, straightforward, but determined expression in the pale blue eyes that looked out of his heavy face. Here was a worker, a plodder, one who, like Grant, kept on "hammering" toward his goal.

"The President is greedy for work," was a frequent remark; but few persons knew how he did toil. Early in the morning he was at his desk, all through the afternoon his labors continued, and at night his burning lamp showed that the public work was still being done. Often it was two or three o'clock before Cleveland went to rest. It would have taken a Thomas Edison to stick

at the job any longer. Cleveland was a leader who intended both to know his work and to do it.

The Lady of the White House.—There was no wife at the White House to cheer the President in his labors. Cleveland had always seemed too busy to find time for marriage. Yet, years before, boxes of beautiful flowers had gone from the Governor's gardens in Albany to celebrate the graduation day of a young Buffalo girl, Frances Folsom. Frances, the daughter of one of Cleveland's former law partners, was charming and intelligent. After her graduation, it was noticed that the Governor never failed to send presents on any other special occasion in her life. A year after Cleveland had become President, Miss Folsom returned from a trip to Europe. A few days later there was a wedding in the White House. Frances Folsom was now Frances Cleveland, the First Lady of the Land. Never before had the marriage of a President taken place in the Presidential home.

Needless to say, the American people were greatly interested in Mrs. Cleveland. The better they knew her, the more they approved of her. The tall, graceful, attractive girl, not yet twenty, was the very wife for the President. She made the White House a true home instead of a mere office building. Visitors carried away pleasant memories of Frances Cleveland's gracious smile and cordial greeting. No President was ever happier than Mrs. Cleveland made her husband.

Great Public Questions.—Cleveland succeeded in doing many good things during his term. He opened to settlement much public land in the West. He began

the building of a fine navy. His Cabinet loyally helped him to get better service at less cost in every government department.

One of the many reforms which Cleveland aided was that known as "civil service reform."[2] President Jackson, fifty years before, had set up the "spoils system," under which trustworthy employees of the government were dismissed, simply because they did not belong to the party of the new President. Their places were often filled by persons entirely unfit. Though the best people of the nation knew that the "spoils system" was wrong, no change was made until, less than four years before Cleveland was elected, President Garfield was killed by a disappointed office-seeker.

Congress then passed an act to bring "civil service reform." The President was given power to arrange that certain offices should be filled only by those who passed highest in examinations. Thus it was hoped that the best persons would be secured for the places. After receiving their appointments in this way, the employees could not be removed as long as they rendered good service. Before his term ended, Cleveland doubled the number of persons who were thus protected. It made the public servants feel that they were indeed carrying out a public trust.

The last great question with which Cleveland dealt in his term was that of the tariff. He believed that the taxes on imported goods were too high. While such high taxes made goods dear for the people, he said

[2] Most persons in the service of the United States government, outside of the army and navy, are in the "civil service."

they also put so much money into the United States treasury that the government was tempted to waste it. The American people, however, believed strongly in a "protective" tariff. This protected our industries, by preventing foreign nations from selling us their goods more cheaply than could our manufacturers. Cleveland, therefore, was defeated at the next election, and Benjamin Harrison became President.

CLEVELAND FISHING WITH HIS FRIEND

Out of Office.—Cleveland did not seem to mind being defeated. He quietly began afresh the practice of law. He joined a well-known law firm in New York City, and soon earned a considerable income. This was a time of pleasure for him. He enjoyed his home and his business, and secured leisure time for his favorite sports

of fishing and duck-shooting. On Buzzard's Bay, which cuts into the root of Cape Cod, he built a summer home, "Gray Gables." Here he and his wife loved to entertain their friends. Dressed in old clothes, Cleveland spent many happy hours on the bay or on some pond. "He will fish through hunger and heat, lightning and tempest," said one of his comrades. "The secret of 'Cleveland luck' is hard work and no let up."

Even while out of office, however, Cleveland was a leader in spite of himself. Though he wished for nothing better than to be let alone, he was besieged by persons who wished him to make speeches for them. He refused as many invitations as possible, but the people would not allow him to stay in the background. When the next election came, Harrison and Cleveland were once more matched against each other. This time Cleveland won.

Back in Harness.—Again Cleveland and his family lived in the White House. He pursued the same honest, straightforward course as in his first term. His lamp burned as late at night as ever. He spent as many delightful hours as ever at his desk. He acted as promptly and as boldly when the need came.

A foolish railroad strike broke out in Chicago. The twenty-two steel roads which centered in Chicago were tied up. Business stopped; the country needed the meat and grain which the railroads had ceased to bring from the West. It looked as though the Chicago mobs would do great damage. The governor of Illinois would not move a finger. Cleveland decided that it was time for him to act. "Uncle Sam is going to see that the trains

run," said he. "If anyone tries to stop them, look out for Uncle Sam's soldiers!" The soldiers went to Chicago, the trains ran on time, and the mobs melted away. The whole country breathed more easily. Cleveland had settled that affair.

A still bigger question came up in regard to foreign affairs. England and Venezuela for many years had been disputing about the boundary line between Venezuela and British Guiana. The United States was very much interested, for this country intended to protect the rights of all the South American Republics. "As you two countries cannot agree, some third party will have to settle the matter," said the United States. "We will not have anyone else interfering in this," answered England.

Then the President, in his quiet, determined way, sent a message to Congress. "Give me power to appoint a body of men," asked he, "to settle who is right in this boundary dispute. If Great Britain tries to hold land which they decide belongs to Venezuela, why—there may be trouble." Cleveland's action stirred up every nation on both sides of the Atlantic. "He wants war!" said many people. But Cleveland did not want war. He wanted peace so much that he was willing to risk having war. To the surprise of every one, England quietly agreed to "arbitrate" the question, and soon the dispute was ended forever. Cleveland had settled that affair, too.

So Cleveland went through his second term as President, doing what he thought was right and caring little what people said about it. He did not try to put new

ideas into the government, but just to carry out Washington's good old idea—to see that this country's business was done wisely and honestly. For that idea he toiled early and late. Praise and blame seemed alike to him; his job was to do his best.

When Cleveland left the White House for the second time, he was sixty years old. He had a good income so that he did not need to practice law again. Now he took up his home in Princeton, New Jersey, where stands the famous University. The daily life passed happily with his wife and children. The University honored him and he gave lectures there. He liked to see the students come to his big white house, "Westland," and he liked to come and talk to them at their morning exercises. Woodrow Wilson, then a Princeton professor, sometimes visited "Westland" to hear Cleveland's ideas about government. Thus passed more than ten years, while the people of the United States saw more clearly each year the honor that was due to such an honest, brave, straightforward man. When he died, America mourned.

FOR DISCUSSON AND LIBRARY WORK

1. Why should a lawyer be well acquainted with history?
2. How did the Erie Canal open Ohio up for business?
3. Can men drafted into the United States army in these times pay substitutes to take their places?
4. Explain fully what is meant by "Public office is a public trust."
5. What great public concerns which Cleveland helped are being carried on to-day?
6. How did the quarrel between England and Venezuela concern us?
7. To what other Presidents would you liken Grover Cleveland? Why?

WILLIAM McKINLEY
1843–1901

LEADER OF OUR WAR WITH SPAIN

"The war has brought us new duties and responsibilities which we must meet and discharge as becomes a great nation."—*Instructions to the American peace commissioners at Paris.*

I. SOLDIER AND STATESMAN

Beginning Life.—"Rub-a-dub-dub! Rub-a-dub-dub!" To the sound of the drum a troop of little fellows, with cocked-hats of paper and wooden swords, marched up the street of a village in Ohio. It was the time of the Mexican War, and they all loved to play soldiers. No boy among them strutted more proudly than tiny William McKinley. Would not the youngster have opened his eyes wide in wonder if some one had told him that he would live through three wars of the United States and be the nation's leader in the last of the three?

WILLIAM McKINLEY

William's father managed an iron-furnace near the village. Though he was not poor, he needed to be thrifty, for he had eight children to support. Fortunately Mrs. McKinley was a fine housewife and made every cent count to the best advantage. Her children all grew up to do her credit. Mr. McKinley, though his

own education had been poor, determined to give the children good schooling. For this purpose he finally made the sacrifice of sending his family to live in Poland, another Ohio town some distance away, although this meant that he could ride over from his furnace only once a week.

At the age of ten, having gone through the "common" school, William entered the Poland Seminary. He liked to learn. Though he was a real boy and delighted in play, yet he always preferred to learn his lessons for the next day before the play began. "I have more fun when I do that," he explained to the other boys. At "speaking pieces" William excelled. While some of the lads and lasses trembled and stammered when their turns came, William found it easy to stand "straight as a stick" and recite his selection.

A Brave Volunteer.—When he was seventeen, William entered Allegheny College at Meadville, Pennsylvania. But soon the lad fell ill and had to go back home. As soon as his health improved he hoped to return, but times were hard and just then his father could not spare the money. William, therefore, went to work. He taught school near his home, and received twenty-five dollars a month, which then was a fair salary. Spring came, and the school closed. Scarcely had William ceased to be a teacher when the young men of the North were called to arms. The South had fired on Fort Sumter.

Most of the young fellows thought it would be great fun to volunteer and to see some battles, but William was wiser. He knew that there would be little fun,

but much hardship, possibly wounds and death. Yet he felt it was his duty to go, and with the rest of the boys from Poland he volunteered for three years.

After some fighting in West Virginia, William McKinley and his comrades were sent North to help against Lee's men, who had invaded Maryland. The blue and the gray armies met at Antietam. William's regiment was in the thick of the battle, but William was left a couple of miles behind as commissary sergeant, in charge of provisions.

The fight at Antietam began early in the day. Noon passed, and still the battle raged. William could not desert his duty, but he did long to take some active part. He thought of his comrades, who since their scanty breakfast had had no chance to eat. Calling to him some straggling soldiers, he put them to work. Soon he was hastening toward the firing-line with two wagons loaded with crackers, hot meat, and barrels of hot coffee.

William drove the foremost wagon. The shells fell about him, bullets whistled through the air, but on he went until he found his regiment. When he began to hand out the welcome meal, the men, stretched on the ground to escape the enemy's shots, raised such a cheer that the nearest general sent an officer to inquire what the noise meant. In spite of the heavy firing, William, unhurt, finished his work of serving the food. It put new life into the soldiers. "That's better than fifty fresh men," they said. For this service, McKinley, not yet twenty, was made a second lieutenant.

Again in the Shenandoah Valley, McKinley made a

dangerous trip to carry orders to a regiment that was nearly cut off from the rest of the army. When he returned from his wild gallop across the shell-swept fields, his colonel said, "I never expected to see you again alive." For this deed he was made captain. Sharp fighting continued. At Cedar Creek, Captain McKinley was one of the officers who helped General Sheridan rally the Union troops on his famous ride from Winchester. For gallant service McKinley became a major at twenty-two.

The Test Case.—When the war ended, young Major McKinley did not rest on his laurels. He at once began to study law in a friend's office. After a year had passed, his older sister Anna furnished the money for William to take six months at a nearby law-school. He profited by this chance, and soon he was admitted to the bar. Anna was then teaching school in Canton, Ohio. She advised William to come to that town, which was larger than Poland and therefore offered more opportunity for success. McKinley respected the wise advice of his sister, came to Canton, and rented an office.

In the building with McKinley was the office of Judge Belden, a prominent lawyer. The Judge took note of the studious, pleasant young fellow who was just beginning in his profession. One afternoon, as McKinley sat with law-book in hand, in walked the Judge. "I am not feeling well, McKinley. This case must be tried to-morrow morning, and you must take it," said the Judge, offering the young man a package of papers.

"But I have never tried a case in my life!" replied

McKinley, astonished. "I can't do it on such short notice!'

"If you don't do it, it won't be done," answered Belden. He laid the papers on McKinley's desk and marched out of the office. McKinley's pride was roused. All night he sat up, learning the case and preparing his arguments. Next day he argued the case before the court and won it. At the very back of the court-room, listening to McKinley, sat Judge Belden, whose illness somehow had disappeared. It was a trick to test the Major's ability. A few days afterward, the satisfied Judge took him in as a partner. From that time McKinley's success was assured.

Congressman and Governor.—When Ida Saxton, the daughter of one of Canton's leading men, returned from a trip to Europe, the Major found her very attractive. In a short time he had won her heart. The couple made their home in Canton in a house given them by Mr. Saxton as a wedding present. They were very happy, and the birth of two little girls added to their joy. But before long the death of her mother and of both her daughters shocked Mrs. McKinley greatly. For the rest of her life she was an invalid, watched over with loving care by her husband.

At thirty-three McKinley determined to run for Congress. It was then the fashion for candidates to say, "My friends have persuaded me to seek the office," but McKinley was honest. "I want it," he simply announced; then he set to work to win his ambition. The voters of his district listened to him and believed

in his ability. McKinley went to Congress. and the voters kept him there for fourteen years.

In Congress McKinley soon became one of the foremost men. The President of the United States when McKinley entered Congress was Rutherford Hayes, who had been the Major's colonel and friend in the Civil War. "Study the tariff question. That is the great problem now," advised President Hayes. McKinley studied the tariff so well that his words upon it were always considered with respect. He took his place as leader of those who believed in a protective system. When a new tariff law was passed it was called the McKinley tariff.

The people of Ohio were proud of their distinguished fellow-citizen. At last they elected him governor. He pleased them well. Though he sternly prevented lawless actions, his heart was tender and he quickly gave help wherever it was needed. At the end of his first term misfortune threatened. McKinley had become surety for a friend in business. The friend became bankrupt, and McKinley suddenly found himself $130,000 in debt. "I will pay every dollar of it in time," said McKinley. "I will resign as governor and practice law again." Mrs. McKinley, who had inherited a large sum from her father, insisted on giving it all to help her husband. When her lawyers objected, she exclaimed, "He has done everything for me all my life. Do you mean to deny me the privilege of helping him now?" But the wife's money was not needed. McKinley's friends raised the money and settled the debt. He was left free to stay in the governor's mansion.

A second time the people of Ohio made William McKinley their head. He was now considered one of America's leading men, and from many states came calls for him to make speeches. Grover Cleveland, the President, was going out of office, and McKinley was nominated to fill his place.

While the candidate on the other side, Mr. Bryan, made a "whirlwind tour" of the country in a special train, McKinley stayed at home in Canton and made his speeches from his own front porch. From morning to night the big lawn on Market Street was crowded with committees who came from all parts of the Union. To each "delegation" McKinley made a clear, powerful speech. The newspapers spread his words to every corner of the land. In November, 1896, he was elected President.

Although Cleveland, the departing head, and McKinley, the coming one, did not agree in politics, they respected each other as earnest, sincere men. McKinley had voted for the civil-service reform in which Cleveland so firmly believed. President Cleveland invited Governor McKinley to dine at the White House on the evening before the inauguration, and they enjoyed a good friendly talk. That is the spirit in which American statesmen should carry on public affairs.

II. IN THE HOUR OF VICTORY

One of the great tasks which President McKinley had promised to attempt was to secure peace and independence for Cuba. This rich island, as large as Pennsylvania, lying at our very door, was in misery. Spain

owned it, but governed it badly. For many years there had been one revolution after another in Cuba. Now the island had fallen into a wretched condition. Spanish soldiers and Cuban rebels prowled over its wasted fields, trying to kill each other. Most of the men had gone into the rebel ranks, but the Spaniards had driven the women and children into the towns, where they starved and died. Unless something were quickly done, Cuba would be ruined.

America was deeply interested in helping to solve the Cuban problem. We needed the sugar and tobacco which Cuba furnished us; we wanted the Cubans to buy our wheat, our meat, our manufactured goods. We were afraid that the diseases which swept over Cuba would be carried into our own country. But above all other feelings was that of pity for the suffering Cuban people.

President Cleveland had offered to arbitrate between the Spaniards and the Cubans, but Spain had refused his help. Now President McKinley demanded of Spain that she should somehow stop this long, destructive war. Spain promised to do her best, and did agree to nearly everything except the independence of Cuba. Every American, however, doubted that Spain would carry out her promises.

The people of America called aloud for war, and almost all the members of Congress urged McKinley to ask Congress to declare war. As long as there was any hope that Spain would agree to his requests, the President refused. "I know what war means," he said. "It means the lives of American boys."

"You are making a great mistake. You will ruin yourself in the eyes of the people," declared many of his friends. Still McKinley waited.

The American battleship *Maine* was blown up while peacefully lying in Havana harbor. More than two hundred and fifty of our sailors perished. "The Spaniards did it," cried the Americans. "Remember the *Maine!*" became a watchword through our country.

THE U. S. BATTLESHIP "MAINE" ENTERING HAVANA HARBOR

Excitement rose to fever heat. Still McKinley held back. At last, one April day in 1898, he sat at his desk in the White House with the long-looked-for message to Congress before him, completed but not signed. A crowd of important men filled the room. "Don't delay another day, Mr. President," they exclaimed. But a telegram arrived from our representative in Cuba. Many Americans were still there, unable to get away. If war were declared now, their lives would be in danger. The President, his face pale with emotion,

rose to his feet. Pounding the table with his fist, he said, "That message shall not go to Congress as long as a single American life is in danger in Cuba. Mr. Secretary, put that message into the safe."

But a few days later came the time for the message. It was sent. Congress declared that Cuba should be free, and that the United States would force Spain to withdraw from the island. We doubled our regular army and accepted, beside, two hundred thousand volunteers. We sent part of our fine navy, which Cleveland had done so much to improve, to the Philippine Islands, and the remainder went to the West Indies.

Our navy was in fine condition. By the foresight of Theodore Roosevelt, who then was Assistant Secretary of the Navy, there had been constant target practice, and the "men behind the guns" were fit and ready. Admiral Dewey's fleet destroyed the Spanish ships in Manila Bay, and the Philippine Islands fell into our hands. Admiral Sampson's gray battleships wiped out the enemy's vessels at Santiago harbor in Cuba. All Europe stood amazed at our wonderful victories on the water.

On land our armies had a harder task. We easily captured the city of Manila and conquered the island of Porto Rico. But the Spanish army at Santiago City gave us much trouble. We lost many men by bullets and disease. The American commander grew discouraged. When at last the Spanish general offered to leave Santiago and go elsewhere if he were not disturbed, our commander wished to make the bargain, but President McKinley telegraphed: "That is not war. What you

went to Santiago for was the Spanish army. If you let it go now you must meet it somewhere else. Make the Spaniards surrender." This was done, and Spain saw that she was beaten.

The time of the war, short as it was, proved a time of tremendous cares for the President. He was a true leader. The room next to his office became the "war-room." Its walls were covered with maps, on which tiny flag-pins showed the positions of our troops and our ships, as announced by telegrams from the front. Every day McKinley, his Secretary of War, and his Secretary of the Navy held a meeting and consulted as to the best moves in the great war-game. Every night the President's lamp burned late, like that of Cleveland. He was as busy as Lincoln had been during the Civil War.

Yet though he grew pale and haggard with many anxieties, McKinley, like Lincoln, could stop to heed a mother's cry. The mother of a young lieutenant lay very ill. Her heart was breaking because she had heard nothing from her son and she feared that he was dead. The pastor of the mother's church telegraphed to the President, asking if news of the soldier son could be obtained. Two days later came the reply: "On receiving your telegram the President at once took up the matter. The young man is alive and well. Please inform his mother." The strain of war had not robbed McKinley's heart of its kindness.

The end of the war marked the beginning of a new period of history for the United States. We not only freed Cuba, but we also received, as our own, Porto

Rico, the Philippine Islands, and other islands far away in the Pacific. For the first time we possessed land halfway around the globe from our nation's capital, across the broad ocean, and inhabited by people strange to our race. America faced new problems of government. The roar of Dewey's guns signaled that America was about to become a great world power.

"I know," said McKinley, "with what added respect the nations of the world now deal with the United States." But the new power brought new problems, and these were hard to solve. "I have had enough of it, Heaven knows," declared the President, when he was asked to run for a second term. "I have had responsibilities enough to kill any man." He wished to go back to Canton to spend the years in his old home. But he was nominated again for President and was elected.

In the fall after he had once more become President, McKinley went to visit the Pan-American [1] Exposition at Buffalo. He was received with great honor, and he made an inspiring speech. "How near, one to the other, is every part of the globe," said he. "Modern inventions have brought together widely separated peoples. God and man have linked the nations together. No nation can longer be indifferent to any other. And as we are brought more and more into touch with each other, the less occasion is there for misunderstandings. Our real eminence rests in the victories of peace, not

[1] "Pan-American" means "All American" or "United-American." The name betokened that we considered all the nations on the western Continent as fellow-Americans.

those of war. Our earnest prayer is that God will graciously vouchsafe prosperity, happiness, and peace to all our neighbors."

The next day, a day of sunshine, the President, after a visit to Niagara Falls, met the crowds of people in a public reception at the Exposition. His private secretary had asked McKinley to omit the reception. "Why should I?" answered the President. "No one would wish to hurt me." That was indeed what the secretary feared, but he answered, "Mr. President, you can't shake hands with a hundred thousand people." "Well, they'll know that I tried, anyhow," replied the kindly leader.

That afternoon a long line of visitors moved past the President. He greeted with special interest the children. Perhaps they reminded him of his own little daughters. It was almost time for the President to leave. Among the last in the line came a slender young man, a foreigner, who opposed all government and thought all rulers bad. As he reached the President two pistol-shots rang out and McKinley staggered. Both bullets had struck his body.

The Secret Service men who stood near McKinley leaped upon the assassin. Some one struck him full in the face. In spite of his injury, the heart of McKinley pitied the man, and he cried, "Don't let them hurt him!" Then the President thought of Mrs. McKinley, whose caretaker he had been so many years. "My wife," he whispered as his secretary bent over him, "be careful how you tell her." None of the President's thoughts were for himself.

For a time it seemed as though McKinley would recover, and the nation was glad. Then came a change for the worse. "I want to go, too," said Mrs. McKinley, as she stood by her dying husband who had loved her so dearly. A week after McKinley was shot, the nation mourned for its leader who had passed into the sleep of death.

All that our people could do was done to honor the dead President. This was a man blameless in his private life and honest in his public service. A million persons joined their contributions, and a national memorial was built at Canton, wherein, as in the tomb of Grant, rest the stone coffins of the President and his wife. On the base of the great bronze statue of McKinley, which stands before the building, are the fitting words: "Good Citizen—Brave Soldier—Wise Executive—Helper and Leader of Men."

FOR DISCUSSION AND LIBRARY WORK

1. Find the names of all the battles in which McKinley took part.
2. Read Thomas Buchanan Read's poem, "Sheridan's Ride."
3. What other candidate for office, of whom you have read, made a "whirlwind tour" and was defeated?
4. Find some additional particulars about the Cuban rebellion against Spain.
5. Tell of the wonderful victory of our navy at Santiago Bay.
6. Which admiral deserved more credit, Dewey or Sampson?
7. In what condition is Cuba to-day?
8. What are the "modern inventions" which, McKinley said, "have brought together widely separated peoples"?
9. What was one of the consequences of McKinley's death?
10. In what ways is the United States a world-power to-day?

CLARA BARTON
1821–1912

ANGEL OF THE BATTLEFIELD

"Your joy will be the joy of those you serve and minister to; your reward the success you achieve. It is a search for the Holy Grail."—*Speech to Red Cross workers at Boston.*

The Little Nurse.—At the time when the Erie Canal was finished, a little girl, Clara Barton, lived on a Massachusetts farm, about twenty miles from the spot where Eli Whitney was born. Though Clara was small and slender, there was a great and daring spirit in her slight body. At the age of five, one of her chief amusements was to go with her brother David to the pasture-field to ride the horse. Clara learned to feel as much at home in a saddle as in a rocking-chair.

But the rides with David came to an end. One day, when Clara was eleven, her big, strong brother was brought home nearly dead. He had fallen from the top of a barn and had struck his head. "David will need careful nursing," said the doctor. "Then I want to take care of him," pleaded little Clara. Her mother and elder sister smiled at the idea, but soon they found that Clara made a faithful and intelligent nurse.

It was a very long illness for David. During two years Clara watched with loving care over her brother. "In all that time," she afterward remarked, "I left his bedside for only one half day. I almost forgot that there was an outside to the house." What was her joy when at last David completely recovered his strength!

How she blushed when he declared that his cure was due to his little nurse!

The Young School-Teacher.—Clara had paid a large price for bringing her brother back to health. In the two years which she had spent shut up in the sick-room she had not grown any taller or heavier. She had be-

Epler's Life of Barton. Courtesy Macmillan Co.

CLARA BARTON

come so bashful and timid that she disliked to meet strangers and sometimes avoided speaking to her own family. Captain Barton, in order to keep his delicate daughter outdoors, gave her a fine horse. Clara called her steed Billy, and took many an exciting gallop with him across the fields.

But though the horseback rides put color into

Clara's cheeks, they did not take away her shyness. She quickly learned whatever her brother and sisters, all teachers, gave her to study, but she did not like to go to school, because she had to meet so many other children. One day, Clara, now fifteen, lay sick with the mumps. Mrs. Barton, in the next room, was asking a visitor what to do with her timid girl. "Give her something to do out in the world," answered the gentleman. "Let her teach school."

The idea of teaching attracted Clara. She went to the next examination for teachers, passed with an excellent mark, and was given a country school. Then the little teacher "let down her skirts and put up her hair" and took charge of forty children, though she was herself but a child. In the school-room she outgrew much of her bashfulness and found that the advice of her mother's friend was wise.

Caring for the Soldiers.—For eighteen years Clara Barton taught in various schools, always with wonderful success. At last, however, her health broke down some years before the Civil War began. She then found a position in Washington as a government clerk.

When Fort Sumter was fired upon, a regiment of Massachusetts troops started off to defend Washington against the Confederates. While passing through Baltimore, the soldiers were attacked by a mob; four of them were killed and thirty wounded; but they reached Washington in time to save the city. Clara Barton went to the station, with many other women, to welcome the brave men from her own state. Among the wounded she saw some of the boys she had once taught.

Clara tore up her handkerchiefs to make bandages, and then ran home to get sheets for the same kind purpose. She helped to feed the hungry, tired men. They had come away from home with no baggage, and the army was not ready to take good care of them. Clara found this out, and immediately advertised in a Massachusetts paper that she would receive supplies and money for her "boys." So much was sent that she packed her room full, then hired space in a store. No soldiers ever fared better than those whom Clara Barton served.

This work for the soldiers acted like magic on Clara Barton's mind. It swept away all shyness. She no longer feared to face other people. Her duty lay clear before her; it was to help the suffering. All of her previous life had been a preparation for this task.

On the Battlefield.—Battles were fought near Washington. As the wounded were brought in, Clara Barton met them. She washed their bloody gashes, put healing salves on their sores, and gave them reviving medicines. "Why could not these men be cared for better on the battlefield?" thought she. "If I could be there I could doubtless save many lives."

"No woman is allowed near the fighting-line," said most of the army officers. "It is no place for a woman." But Clara Barton said, "I am needed." At last the officers yielded to her appeals. Soon the wounded soldiers learned to look for the "Angel of the Battlefield" with her wagons of supplies, and blessed her for the tender care which she gave. For two and one-half years Clara Barton carried on her noble work. She

suffered many hardships; she was nearly captured; twice she escaped death by a hair's-breadth; but she cared not if only she could soothe pain and save life.

The Red Cross in Europe.—When the war ended, Miss Barton was asked to give many lectures on her experiences. As she had inherited from her father enough money to support her, the proceeds from these lectures were given to help trace the eighty thousand missing men whose fate had never been learned by their dear ones.

One night, on the platform, Clara Barton's voice failed. Next day she lay on a bed of sickness. The hardships of the battlefield had done their work. "Three years of rest," prescribed the doctor.

In Europe Clara Barton hoped to find the needed rest. Two months after her landing, she was in Switzerland. To her came the president of the "International Committee for the Relief of the Wounded in War." The sign of this organization was a red cross upon a white ground, so it was usually called the "Red Cross Society." Back of the society was the Geneva Treaty, signed by all the civilized nations of the world except America. "Why did not America sign?" asked the Red Cross president. "Why does not your country want Red Cross societies?" Clara Barton could not answer.

Miss Barton had never known that the Red Cross existed, but she now understood its great work. A year later came the war between France and the various German states. Again the Red Cross came to Clara Barton. She could not resist the call to help. Though

her doctors said, "It will kill you," Miss Barton set off for the battle-front along the Rhine. For more than a year she labored, setting up hospitals and work-rooms, saving both wounded soldiers and starving women and children. French and Germans alike received her help. Europe loved and honored Clara Barton, and America was proud of its distinguished daughter. When, at the end of 1873, she returned home, it was with the resolve to set up the Red Cross Society in her own land.

The American Red Cross.—By letters to her friends, by many speeches, by visits to the President, then by appeals to Congress, Clara Barton carried on her campaign for the Red Cross society. The great objection to it in the minds of public men was that as we never expected America to have another war, the society would not be needed. "But we have great national disasters," answered Miss Barton. "There are terrible fires, and floods, and fevers. The Red Cross can relieve sufferers from such evils."

Almost in despair of getting help from the Government, Clara Barton formed a private Red Cross society. Three women and one man were the first members, but "great oaks from little acorns grow." As soon as James A. Garfield became President a better day opened for the Red Cross. He had been a soldier; he had seen and admired Clara Barton's work. Even though a murderer's bullet struck him down, Vice-President Arthur, who then became President, felt Garfield's spirit, and signed the Geneva Treaty. This act bound the American Government to favor the Red Cross.

Mississippi River floods, Florida yellow fever, Western tornadoes, Southern hurricanes, many other disasters, called into action the aid of the Red Cross. To famine sufferers in Russia went grain-ships bearing that flag of comfort. Clara Barton herself, at the age of seventy-five, traveled to Turkey with a band of workers so that the suffering Armenians might be relieved. Each year the Red Cross strengthened its hold upon the heart of America.

Service in Cuba. Clara Barton Retires.—When, in 1898, the *Maine* lay in Havana Harbor, Clara Barton was in Havana, helping the poor Cubans. Captain Sigsbee entertained her at lunch on this battleship, and the crew drilled for her pleasure. Only a few days later, as Miss Barton sat late in the night at her writing table, there was a deafening roar, a blaze of light over the harbor, and the room shook as though with an earthquake. The *Maine* had been destroyed. As Clara Barton approached the burned survivors in the hospital, the first one said, "I knew you would come to us. I am so thankful."

That was the beginning of much service for Americans in Cuba. When the Rough Riders and their fellow-troops stormed San Juan Hill, Clara Barton and her nurses were on hand with their supplies. At the dawn of the day after the battle a sturdy figure in khaki appeared at the Red Cross tent. "I have some sick men in my regiment who won't give up and go to the hospital. I need some special food such as you have," said the officer. "Can I buy it here?" "Not for a million dollars," answered Miss Barton "But my men

need them, and I am proud of my men," replied the officer. "We don't sell hospital supplies," said the Red Cross president. "Then how can I get them?" "Just ask for them, Colonel."[1] "Oh!" smiled Roosevelt, in relief, "just lend me a sack and I'll take them right along." Ever after that the Red Cross had a staunch friend in Theodore Roosevelt.

CLARA BARTON AND THEODORE ROOSEVELT IN CUBA

Six years later the Red Cross Society became an actual part of the United States Government. The President of our country became the Red Cross President, and United States officials formed part of the Board of Directors. The volunteers who work in the Red Cross relief work are now actually in the service of Uncle Sam. Even a mightier hand than that of

[1] Theodore Roosevelt was then only Lieutenant-Colonel of the Rough Riders. Dr. Leonard Wood was their Colonel.

Clara Barton now ruled the American Red Cross. The need for her direction was over. At the age of eighty-three she retired from the work, but lived, busy and active, in beautiful Glen Echo, just outside of Washington, until she passed away at the age of over ninety.

Could Clara Barton have lived only a few years more she would have seen her beloved Red Cross doing wonderful work during the Great War. Red Cross ambulances carried the wounded soldiers to fine Red Cross hospitals. The boys in khaki, as they traveled to and from the military camps, were served with refreshments by the Red Cross canteen workers. The families left at home were watched over by the Red Cross Home Service department. No wonder that Uncle Sam counted the Red Cross as one of his chief aids, and that he gladly helped to erect in Washington the splendid marble building which is the national headquarters of the society. As that structure stands facing the Washington Monument to-day, it seems to represent both the beauty and the usefulness of the life of Clara Barton.

FOR DISCUSSION AND LIBRARY WORK

1. After what battles of the Civil War did Clara Barton give help to the wounded?
2. How did Clara Barton twice narrowly escape death?
3. How did the European Red Cross begin its work? Whose was the idea?
4. Mention several additional United States disasters in which the Red Cross gave its wonderful aid.
5. What other great women workers became famous through their relief of suffering?
6. Tell of some forms of Red Cross work in the Great War that have not been mentioned.
7. What Red Cross work has been done in your school? In your class?

FRANCES ELIZABETH WILLARD
1839–1898

LEADER OF THE WHITE RIBBON ARMY

"Alone, we can do little; united, we are batteries of power."—*Speech at Chicago.*

The Tomboy.—When Harriet Beecher Stowe published "Uncle Tom's Cabin," a young girl was living on a farm in the "backwoods" of southern Wisconsin. This girl, Frances Willard, became in time even more famous than Mrs. Stowe. Frances, however, thought it would be much better if she were a boy instead of a girl. She did not care for girls' work. In her journal or diary she wrote, "Now I have got to do my awful needlework," and "I baked a cake, but had no luck at all." Once her name was published in a children's paper, and Frances felt very proud until she found it was printed "Francis." Then she complained to her mother, "I guess they don't think a girl can come to anything in this world anyhow."

Active Frances, with her eager blue eyes and her flying light hair, was a regular outdoor girl. She went fishing in summer and coasting in winter, she played ball and shot at a target. Though she liked to read, and to write stories, she preferred to do both in the fresh air. In the top of a big oak tree Frances made a seat. Then she nailed to the oak a board on which she painted, "The Eagle's Nest. Beware!" In her "nest" far above the ground, the lassie passed many a free, happy hour.

On the Wisconsin prairies nearly every one rode horseback. Mr. Willard, however, thought it was too dangerous for his daughter, and would not let her even try. How Frances envied her older brother Oliver, as he saddled his horse and trotted off! At last she said,

Gordon's Life of Willard

FRANCES ELIZABETH WILLARD

"I'll just have to ride something!" With a great deal of trouble she trained a cow to carry a saddle. Although riding a bumpy old cow proved to be no fun, Mr. Willard, seeing how anxious his girl was to ride, gave his consent for Frances to use a horse. Then her cup of enjoyment was full.

Getting "Advantages."—Until she was sixteen Frances did not go to a real school. Her father and mother were well educated and had many books. They also subscribed for magazines and newspapers; so that Frances learned much through reading and could express her thoughts well. Yet she longed for regular study.

When at last a log school-house was built in the

FRANCES WILLARD GOING TO HER FIRST SCHOOL

neighborhood, Frances could hardly wait for the first Monday of the term. Long before light, on that cold January day, she got up and stirred about the house. She could scarcely eat any breakfast, and grew so impatient that Oliver yoked the oxen to the sled and took her to school before the "master" had arrived. Frances promptly got the school key from the nearby house

where it was kept, made a fire in the stove, and took possession of the building. "Now I shall have advantages like other folks," she wrote that night in her journal.

Two years later, Frances went to a girls' college in Evanston, a village just north of Chicago. She was studying there when Lincoln was nominated at Chicago for President. "I wish I had been there," she wrote. "The accounts that father and Oliver gave of the excitement, the cheers, the handshakings, and the handkerchief wavings have made me very enthusiastic." Frances had already decided that it was a woman's duty to understand politics and to vote. After Frances had heard Catherine Beecher lecture, she was even more sure of that opinion.

For about ten years Frances taught in various places. Then a rich girl friend took her as a companion on a trip to Europe. They did not return to America until nearly three years had passed. Frances was now thirty-one.

Leader of College Girls.—Back in Evanston once more, Frances made her home with her widowed mother in "Rest Cottage." One day, as Frances was busy tacking down the stair-carpet, a friend, the wife of a professor in the nearby college, came in. "Frank," she said, "I am amazed at you. Let some one else tack down carpets, and you take charge of our new college for women." "Very well," replied Frances, jokingly, "I was only waiting to be asked."

But it proved to be no joke. Frances Willard be-

came the first woman president of an American college. The college, however, as Frances said, was "all dreams and no dollars." It had not yet come into being. Frances had to travel about, make many speeches on the need of higher education for women, and beg for money. She grew used to public speaking, and her pleading for subscriptions was successful. The "Women's College of Northwestern University" finally opened its doors.

Frances Willard dearly loved the girl students whose life she directed. On their part, the girls showed such affection for their leader that some persons said, "She has bewitched them." Not many years, however, did Frances stay at the college. Some of the college officers interfered with her plans and she thought it best to resign. Because her resignation had not been necessary, to give up the headship of the college, at thirty-five years of age, seemed like throwing away success. The future proved, however, Frances Willard was just about to find her real success in the world.

The Cause of Temperance.—In the previous year, 1873, there arose a great movement among the women of America. It was called the Woman's Temperance Crusade. For seventy-five years there had been temperance societies in our country, but their members were all men. Women were not supposed to take any part in such public affairs. Now, however, the American sisters and daughters, wives and mothers, began to show that the fight against liquor was indeed their business. Liquor would not let them alone. It ruined their

men and spoiled their homes. Could the women afford any longer to let the liquor business alone?

In her college work Frances Willard had already done much to help the temperance cause. As soon as she left the college, she traveled to the East to see what work was being planned by the women temperance leaders there. She felt called to join with them, but how was she to live? Little "Rest Cottage" and a small sum of money was all that she and her mother owned.

While pondering over the matter, Frances opened the Bible which lay on the table in the hotel room. Her eyes fell upon a verse, "Trust in the Lord, and do good . . . and verily, thou shalt be fed." That seemed like an answer to her doubts. Soon two letters came to her on the selfsame day. The first asked her to be head of a fashionable boarding-school for girls, at $2400 a year. The other offered her the office of president of the Chicago branch of the Women's Christian Temperance Union, which had grown out of the temperance crusade by the women. In this office Frances would receive no salary at all, but it was this call which she accepted. Now she had found the work which made her happiest and did most good to others.

For God and Home and Native Land.—With her few brave and earnest supporters, Frances Willard began her task in Chicago. Her fellow-workers soon loved her and looked up to her as much as had her college girls. She was a wonderful speaker, and thus made thousands upon thousands of people first consider the temperance question, then believe in the necessity of temper-

ance.[1] From the bare little office of the Chicago W. C. T. U. came many articles which Frances managed to have published in the city newspapers.

In her zeal for the cause Frances at first accepted no salary. All the money to support her came from small collections at various meetings in which she spoke. Often her tired feet walked several miles because she had not car-fare; often she went hungry because her purse was empty. At last the women of the W. C. T. U., who were entirely willing to pay their leader, learned how poor she was. They gave her a regular salary, and her needless suffering ended; but Frances Willard often said afterward, "I am glad of those days of poverty, because now I can truly sympathize with the hungry people I meet."

Only a few years had passed when Frances became president of the National W. C. T. U. It was a great thing to be head of such an army of American women. The first aim of these women was to stop the sale and the use of strong drink, but they were ready to help along many other right and just causes. "We are working for God, and home, and native land," said their leader.

The Women's Army.—When, in 1888, the National W. C. T. U. held in New York its fifteenth yearly convention, its leader, Frances Willard, was the best-known woman in the United States. She looked from

[1] Temperance does not mean exactly the same as total abstinence from intoxicating drink, but the W. C. T. U. considered that it had that meaning. "Temperance" was a more convenient term to use than was "total abstinence," and it has the broader meaning, applying to wise conduct in many ways.

the platform of the convention hall over a crowd of delegates representing half a million of the best women of our land. Every state in the Union had sent delegates. There was a force in these earnest women which no wise governing persons could afford to despise. The temperance idea was growing mighty.

Forty different kinds of work for goodness and right did the W. C. T. U. carry on. There was scientific temperance instruction in the schools, there was a temperance hospital, which used no liquor in curing its patients, there was a temperance publishing association. Even a department of mercy, to prevent cruelty to animals, was part, and a very important part, of the W. C. T. U. work.

Do you think Frances Willard had an easy task to direct such a great body of active people? Indeed, she was kept busy. Her strength of body and of mind was taxed to the utmost. She was called upon to make journeys each year all over the country. For twelve years her average of public speeches was one a day. While on the train her pencil scribbled off many articles to inspire her army of helpers. Ten thousand special letters went out yearly from her own office. "What it would be to have an idle hour," she said, "I find it hard to fancy."

Temperance Triumphs.—Three years after the great New York convention, there was one at Boston, but now it was a World's W. C. T. U. The white ribbon, the sign of the union, had encircled the globe. Who should be president if not Frances Willard? As she saw before her the temperance representatives from

thirty-four countries, she was glad and proud. "We represent the human rather than the woman question," she cried. "Ours is the cause of home protection!"

For seven years more Frances Willard led her women in the fight against "home's greatest enemy—the saloon." Every year saw hosts of new members for the W. C. T. U.; every year saw progress being made in the defeat of the evil spirit of strong drink. At last, just before America went into the war with Spain, a fatal influenza attacked the great White-Ribboner. As she lay on her sick-bed, Frances Willard still tried to direct the temperance work. "It has been a great fight," she said, "and people will never know what we've been through."

The great leader of the W. C. T. U. was gone, but she had convinced the best people of the nation that the liquor habit was wasteful and deadly. The railroads began to refuse to employ men who drank. Business houses followed their example. Americans must have clear heads and steady hands, said intelligent employers. At last in 1918, forty-five out of our forty-eight states voted that our land should do away with the manufacture of intoxicating liquor. Could Frances Willard have lived only twenty years longer, she would have been able to rejoice with the rest of the W. C. T. U. army at the defeat of this enemy to "home and native land."

FOR DISCUSSION AND LIBRARY WORK

1 Which little girl had the more fun, Harriet Beecher Stowe or Frances Willard? Prove your answer.

2. Are schools necessary in order to educate American children? Why?
3. Find as many reasons as possible why American women were opposed to the liquor business.
4. From some W. C. T. U. find out what lines of work the society is carrying on to-day.
5. Why was a knot of white ribbon selected as the emblem of the W. C. T. U.?
6. In which of your school studies have you come closest to the work of the W. C. T. U.?

THEODORE ROOSEVELT
1858–1919

THE PRESIDENT OF ACTION

"Success comes only to those who lead the life of endeavor."—*Speech at Minneapolis.*

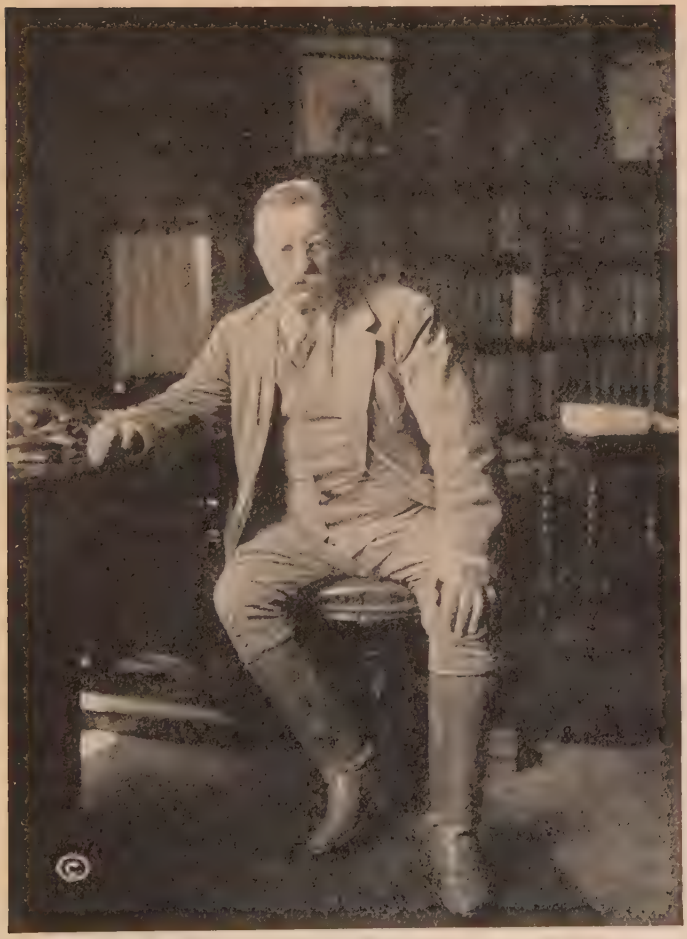
I. VIGOR AND VIM

The Weak Boy Grows Strong.—In a bedroom of a New York City mansion,[1] one night during the Civil War, an anxious father walked up and down carrying his little son. The lad had asthma, and could scarcely breathe. It seemed at times as though he would choke to death. "Can Theodore live to grow up?" was the question in Mr. Roosevelt's mind that night and often afterward.

Theodore Roosevelt did live, but he was far from being strong. At the age of eleven, he was tall and thin, with "legs like pipestems" and a narrow chest. His blue eyes were so near-sighted that he seemed awkward and clumsy when outdoors, yet though he loved to read, he took pleasure in being in the fresh air.

As he pored over some favorite stories of outdoor life, the thought came to him, "I will make myself strong. I want to be like those fearless men I read about, who can hold their own in the world." Fortunately for Theodore, his father was rich and gave him every advantage. On the big back porch of the New

[1] The birthplace of Roosevelt was on East Twentieth Street.



THEODORE ROOSEVELT

York home was a regular gymnasium with all kinds of apparatus. In summer Theodore led a free, happy life at the Roosevelt home near Oyster Bay on the north

shore of Long Island. When the winter tried the boy's weak lungs too severely, he was taken across the ocean to a warmer climate. Theodore was a fortunate lad.

When Theodore became thirteen, he put on spectacles for the first time. They opened to him a new power. He saw how beautiful was the world, and felt that he stood on equal terms with other boys. Now he had more reasons than ever for growing strong. He practised hard in the porch gymnasium, he took boxing lessons, he swam, he rowed his boat over stormy waters, he tramped long distances, he took horseback rides, he camped out in the woods. By the time he was ready to enter college, Theodore Roosevelt had gained broad shoulders and strong muscles. Though he still looked somewhat slender and delicate, he could stand more hardship than many bigger fellows.

The College Man in Politics.—At Harvard College it was easy to find young men who surpassed Theodore in either athletics or studies, but it was hard to discover any one who had a more active body or mind. Theodore liked to wrestle and box, even though he had to box with his spectacles on his nose and thus ran the risk of having broken glass driven into his eyes. His favorite studies were those that took up the life of man or explained the great outdoors. Anything which dealt with life and action appealed to him. "He is a good sportsman," said his classmates. "He is always fair and square, and never tries to humbug other people or himself either."

Almost as soon as he graduated from college, at the age of twenty-one Roosevelt married Alice Lee of

Boston, and the young couple set up housekeeping in New York. Although Roosevelt had no need to work for a living, he was not disposed to remain idle. "You can do a great deal of good in politics," said one of his uncles, and Roosevelt began to help along the cause of good government. "You will meet rough, ignorant, disagreeable people," complained some of Roosevelt's rich friends. "Well, if they are successful in politics they are better than I," replied Theodore, "for they govern you and me. Are we satisfied to let them do it?"

Into politics went Roosevelt, and he studied law to learn the proper ways to carry out his ideas. Soon he was elected to the New York legislature, but while he was in Albany, doing his best to give the state good service, a great cloud of sorrow came over his life. His young wife died, leaving a tiny baby girl, Alice. Roosevelt tried to forget his grief by working harder than ever in politics, but when Grover Cleveland was elected President, Roosevelt, who opposed him, lost his office. There was nothing now to hold him in New York. Westward he turned and became a ranchman in the wild territory of Dakota.[2]

The Ranchman. Back to Public Service.—On his Elkhorn ranch Roosevelt made his home for the next two years. He lived and worked with the cowboys. As the men of the plains learned that this young fellow of twenty-five asked no favors and was always ready to do his share, they forgot to laugh at his glasses and his "college talk." Roosevelt, on his part, admired the

[2] It then had not been made into the states of North Dakota and South Dakota.

bravery and the skill of the ranchmen; he loved their life. "We knew toil and hardship and hunger and thirst," said he, "and we saw men die violent deaths; but ours was the glory of work and the joy of living."

Roosevelt's friends in New York did not forget him, though he was far away. One evening, as he opened his mail before the blazing fire in his big log cabin, Roosevelt read the news that he had been nominated for Mayor of New York City. At once he began to pack his trunk, and the next day took the train back to his home city. He did not expect to be elected, but he made a good fight, and was not much disappointed at losing. A playmate of his childhood, Miss Edith Kermit Carow, became his wife, and he once more settled down in New York, though for several years he spent vacations upon the Dakota ranch.

Under President Cleveland Roosevelt worked hard for "civil service reform" in the United States Government. He showed the nation that "Fair Play" was his motto. Then he became one of the heads of the police department in New York City. Before long the newspapers of the whole country published items about the young police commissioner who stood so firm for honesty and good order in the greatest city of our land. For a time he was the most interesting man in New York. No one could scare him, no one could keep him quiet when he was sure he was right.

Fine Work for Our Navy.—Next, President McKinley made Roosevelt Assistant Secretary of the Navy. It was not thought to be an important position, but Roosevelt's chief left him free to do very much as he liked, and

Roosevelt made the position important. Things had a way of happening when he appeared.

From the time Roosevelt took the post, he believed that we would be forced into war with Spain over Cuba. Our navy had good ships and good officers, but our men were poor in gunnery. "The only shots that count are the shots that hit," said Roosevelt. Congress gave the navy nearly a million dollars for ammunition and thought that was a generous amount. In a month Roosevelt was back again asking for more powder and shells. "What have you done with the money we gave you?" said Congress. "Burned it all up," answered Roosevelt. When war did come, the good shooting of the American sailors knocked the Spanish ships to pieces so quickly that it surprised the world.

It was Roosevelt who encouraged Lieutenant Sims (now Admiral Sims, who commanded our fleet in European waters during the Great War) to keep up the gunnery of the navy. It was Roosevelt who secured for Dewey the command of our ships on the coast of Asia and saw to it that he was ready for action when it was necessary to capture Manila. But when war broke out, Roosevelt stopped preparing others to fight and took steps to get into it himself.

The Rough-Riders.—"I will raise a regiment of good fighters, outdoor men," promised Roosevelt. "If you do that, I will make you its colonel," said the Secretary of War. Though Roosevelt had trained for four years in the New York National Guard, and had reached the rank of captain, he was not puffed up with too much pride. "I do not know enough yet to command a regi-

ment," answered he. "Make me lieutenant-colonel, and give the command to my friend, Doctor Leonard Wood." It was done. In the new regiment college athletes from the East met cowboys and Indian fighters from the West. The American people called them "The Rough-Riders," and every one thought that was a fine name.

At last, by the energy of Wood and Roosevelt, the Rough-Riders found themselves in Cuba. All was confusion, for our army was not in the good condition of our navy. Nearly half the Rough-Riders, and nearly all of their horses, had been left at home because there were not ships enough to carry them. Three days after landing, Roosevelt's regiment, marching through the jungle, heard the Spanish bullets whistling about their ears. Before they could drive away the enemy nearly fifty of the Rough-Riders lay on the ground. Roosevelt, while warning his men to take cover, refused to do so himself. Fear had no place in his nature.

Charging the Hill. High Honors.—A few days later the Rough-Riders arrived in front of the main Spanish army. Dr. Wood had been given a higher command, and Roosevelt now headed the regiment. When the first American cannon was fired, the men cheered wildly. Roosevelt moved his men toward the Spanish lines, then waited for orders to advance further. No orders came. He took matters into his own hands. Waving his hat, he rode forward, through the lines of another waiting regiment. Stirred by this example, the men of the second regiment jumped up and followed also.

Up the slope of Kettle Hill went the Americans. Roosevelt's horse became entangled in a wire fence, and he finished the charge afoot. The hill was won. Then across the next valley and up San Juan Hill stormed Roosevelt, Rough-Riders and regulars, white and black, crowding behind him. The Spaniards could not stand the charge. They leaped from their trenches, left their machine-guns, and fled, Roosevelt managing, however, to shoot one more with his revolver.

The Spanish army surrendered before the Americans could do any more fighting, and the Riders came home. Roosevelt was now a hero to the nation. Every one knew how brave he had been and how well he had performed all his duties as a soldier. The people of New York State made him their governor. For two years he served the people well. Then came a call for him to be Vice-President. Roosevelt did not care for that office; he wanted to be governor once more; but at last he yielded to his friends and was elected along with President McKinley. Some of his enemies laughed in their sleeves. "He is buried in that office," they said. "The people will forget him." But plans sometimes go wrong.

II. THE COMPLETE AMERICAN

The New President.—The enemies of Roosevelt could not foresee that a deadly bullet would strike down President McKinley, but that happened at Buffalo. As Roosevelt sat one vacation day by the shore of a lonely lake far in the Adirondack Mountains, a messenger waving a telegram came out of the woods. "The

President is worse," said the message. Before Roosevelt could reach the railroad station, many miles away, McKinley was dead, with only half a year of his term gone. Roosevelt, therefore, stepped into the office for nearly the full four years. Not yet forty-three, he was the youngest of our Presidents.

Many persons said that Roosevelt was too hasty and headlong to be a good leader of the nation, but that did not prove to be the fact. On the whole, Americans liked his plain way of talking, his vim, his quickness, and his freedom from show. He never pretended to be anything but a man among his fellow-men. Though our people did not always agree with his strong opinions, they always gave him credit for being honest and desiring to do right. When Roosevelt used one of his most famous expressions, "square deal," every one knew that he meant it.

Conservation and Peace.—The first big work of President Roosevelt was conservation. By this he meant saving America's real wealth—her forests, her minerals, her waters—and using these to the best advantage for the benefit of all. Selfish people wanted to grab these things or to waste them, but Roosevelt said, "Not so. We are ruining our land. We must restore our fine forests; we must use our coal, our oil, our natural gas, as wisely as we can; we must keep our streams pure and make them work for us, too." Now every educated person knows what conservation means and wants to see it carried out; but to Roosevelt must be given the honor of putting that idea into the minds of the Americans.

When the next Presidential election came, the people thought Roosevelt had done so well that he ought to stay in the White House. He was elected by the greatest number of votes that any President had ever received. Russia and Japan were at war. The war was a frightful loss to both nations, and it began to be very bad for the rest of the world. "Can't there be peace?" asked Roosevelt. "I offer my services to get these fighters to agree." On the deck of the President's yacht, the *Mayflower,* the representatives of the enemy nations came together. Before the treaty of peace was finally signed, it took three months of hard work on the part of Roosevelt; but the peace was worth it. "Mr. President," said one of his friends, "I think we'll have to make a new department in our government and put you in as Secretary of Peace."

The Great Canal.—Another task was on the President's mind. It was the Panama Canal. For seventy-five years, Americans had been hoping that a canal would be made between the Atlantic and the Pacific. The French had begun to dig one through the Isthmus of Panama, where the land is narrowest. Under the leadership of a famous engineer, who had already dug the great Suez Canal, they started the work with high hopes. This was a harder task, however. Their men died like flies from the yellow fever, and those who handled the money also wasted much of it. Work stopped, and the costly machinery rusted in the Panama jungle.

America wished to take up the work in which the French had failed, but we found it hard to strike a good bargain with either the French or with the country of

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BIRD'S-EYE VIEW OF PANAMA CANAL LOCKS

Colombia, which owned the Isthmus. Finally the people who lived on the Isthmus separated from Colombia and formed the Republic of Panama. In spite of Colom-

bia's objections, President Roosevelt made with Panama a treaty by which we bought for ten million dollars a strip of land ten miles wide stretching from ocean to ocean. As we intended to build our canal through it, this strip was called the Canal Zone. It is about one-fourth the size of the little state of Delaware.

In 1904 the work was begun. There were many difficulties. Foremost was that of health, but Doctor William C. Gorgas was given charge of that matter. He made war on the fever-carrying mosquito, and before long the Canal Zone was changed from a fever-swamp to a real health resort. Yellow fever and malaria vanished with the mosquitoes. Next, the engineers had to cut away the jungle, fill up the marshes, blast away the hills, construct immense locks, build great dams. They went at everything with American energy, and, as Roosevelt said, "made the dirt fly."

Roosevelt's Big Ditch.—Two years after the canal work began, the President thought he ought to see with his own eyes how it was getting along. No President before him had ever left the United States during his term of office, and people had grown to think that it would be wrong for a President to step off American soil. Roosevelt, however, never worried as to what other people had done or had not done. He wanted to see the Canal, so off he and Mrs. Roosevelt started on one of our battleships. On the way the President amused himself by eating a meal with the crew and by shoveling coal into the big fires under the boilers.

When Roosevelt arrived at the Isthmus, every one turned out to welcome the stocky, muscular, vigorous

head of our nation. The high officers of the Canal planned a banquet for him. "I have no time for banquets," said he. "I came to inspect the canal." As he landed, a downpour of rain soaked his white duck suit, but Roosevelt never in his life stopped on account of weather. Straight ahead he went, viewing everything, with a stenographer by his side taking down the answers to questions which he fired in machine-gun style. For three days he poked into every nook and corner. "You are a straight lot of Americans, and I am proud of you!" said he at last to the Yankees who were putting the canal through; and they shouted in reply, "Teddy's all right!"

But the Canal went forward too slowly for Roosevelt's impatient spirit. "It must be pushed," thought he. Finally he selected to push it Colonel George W. Goethals, of the Engineer Corps, who had seen service in our war with Spain. No better man could have been chosen. Colonel Goethals did push it along. Forty thousand Americans, besides an army of West Indian negroes and brown men of the Isthmus, worked on the job.

Although it was beyond even Uncle Sam's great power to complete it in Roosevelt's term, the Canal was finished nearly a year before the time fixed. One August day of 1914 the Secretary of War, on a United States vessel, crossed the Isthmus by water and declared the Canal open to commerce. Roosevelt's "Big Ditch," the new roadway for the world, a magnificent monument, was done. Had it not been for "Teddy,"

it is not likely that we should have seen this wonderful water-path.

Africa and Europe.—When Roosevelt's term ended, he was asked by his friends to seek the office once more, but he refused, and Judge Taft became President. Roosevelt had long been planning a vacation, and he took it in a novel way. With his son Kermit and a few friends, Roosevelt set off for East Africa, and there spent a year hunting big game. It was a year of thrilling adventure in a strange land. Elephants, lions, even the savage rhinoceros, fell before his rifle.

Roosevelt's return through Europe was a procession of triumph. Everywhere the people flocked to see this soldier-hunter-statesman-President. Everywhere the important men of the various cities asked him to lecture or invited him to splendid banquets. No American since General Grant had received such a royal reception. In the minds of the people of the Old World, Roosevelt's energy and daring stood for that of his fellow-Americans. He was the great representative of our great country, and the rulers of Europe delighted to do him honor.

Elections and Exploring.—Back again on his native soil, Roosevelt sought his home and family at Sagamore Hill, but he did not rest long there. Rest was not part of his life. Over the country he went preaching the duty of keeping ourselves up to the highest point of training, either for peace or for war. He wanted to see the best America which Americans could make.

No wonder that when the next election came for President many voices called for Roosevelt. President

Taft wished to return to the White House, and Woodrow Wilson, governor of New Jersey, entered the race. Roosevelt's party was called by the good name of "Progressive." Excitement concerning the election was great; in the end Roosevelt and Taft so directly opposed each other that Governor Wilson became our President.

Again Roosevelt started off on an exploring tour, this time in South America. "I want to do this before I get too old," he said. The many hardships were endured by him as uncomplainingly as ever. Under the guidance of a noted Brazilian army officer, Roosevelt and his party plunged into absolute wilderness, and when they appeared once more they had put a new river upon the map.

Roosevelt and the Great War.—To a man of such spirit as Roosevelt, the entrance of America into the Great War was an instant call to arms. He offered to raise, not a regiment, but a division (twelve thousand men) of volunteers. He could easily have carried out his offer, but the War Department had other plans, and did not accept, so Roosevelt stayed unwillingly at home. His four sons—Theodore, Kermit, Archie, and Quentin—all volunteered. Quentin, the "baby," became an aviator, and met a soldier's death in France, while Theodore, the eldest, gained the rank of lieutenant-colonel. All proved worthy sons of their brave father.

Roosevelt lived to see the end of the fighting. He rejoiced that his country had taken a share, and a great share, in beating down Germany and making the world safe for democracy. But his rugged health was broken

by wilderness hardship and constant toil and thought. He passed away before the peace terms were signed, but though he did not reach old age, his was a full and successful life. A man both of words and of deeds, at home in the field of sport and the field of books, standing for the best he could imagine for the American family and the American nation—was there ever a more complete American than Theodore Roosevelt?

FOR DISCUSSION AND LIBRARY WORK

1. Name all the lines of athletics which Roosevelt carried on during his life. Which of these do you like best? Why?
2. What were some of Roosevelt's experiences with the cowboys and "bad men" of the West?
3. Find and tell in class some interesting stories of Roosevelt's good work while he was at the head of the New York police department.
4. Find out how Leonard Wood and Theodore Roosevelt got their regiment to Cuba.
5. Why did Roosevelt's enemies say that he would be "buried" in the office of Vice-President?
6. President Roosevelt also was shot by a "crank." Tell about the incident.
7. Prove that conservation has done the nation good.
8. Tell an interesting story about the building of the Panama Canal.
9. Describe the voyage of Roosevelt down the "River of Doubt," or "River Theodore," in Brazil.
10. Name several of Roosevelt's books which show by their titles his various lines of action.

SOME BOOKS TO ASK FOR AT THE LIBRARY

ABBOT.—"Notable Women in History." (Mott, Stowe, Barton, Willard.)
ABBOTT.—"The Story of Our Navy for Young Americans."
BACHMAN.—"Great Inventors and Their Inventions." (Whitney, Fulton, McCormick, Morse, Bell, Edison.)
BALDWIN.—"Abraham Lincoln."
BALDWIN.—"An American Book of Golden Deeds." (Barton.)
BARSTOW.—"A New Nation." (Fulton, Stowe, Lincoln.)
BARSTOW.—"The Progress of a United People."
BLAISDELL.—"The Story of American History."
BOLTON.—"Lives of Girls Who Became Famous." (Mott, Stowe.)
BRIGHAM.—"From Trail to Railway Through the Appalachians."
BROOKS.—"Historic Americans." (Whitney, Morse, Lincoln, Grant.)
BURNS.—"The Story of Great Inventions."
CARTER.—"When Railroads Were New."
CHURCH.—"Ulysses S. Grant."
COFFIN.—"The Drum-Beat of the Nation."
COFFIN.—"Redeeming the Republic."
COLLINS.—"The Boys' Book of Submarines."
COOMBS.—"Ulysses S. Grant."
CROOK.—"Memories of the White House." (Lincoln, Grant, Cleveland, McKinley.)
DARROW.—"The Boys' Own Book of Great Inventions."
EPLER.—"Life of Clara Barton."
————"Famous Adventures and Prison Escapes of the Civil War." (The Century Co.)
GILMAN.—"Robert E. Lee."
GREENE.—"A Lincoln Conscript."
HALE.—"Stories of Invention." (Whitney, Fulton.)
HILL.—"On the Trail of Grant and Lee."
HOLLAND.—"Historic Boyhoods." (Fulton, Lincoln.)
HOLLAND.—"Historic Inventions." (Whitney, Fulton, McCormick, Morse, Bell, Edison.)
HULBERT.—Pilots of the Republic." (Clinton, Railroads.)

ILES.—"Leading American Inventors." (Fulton, Whitney, McCormick, Morse.)
JENKS.—"When America Became a Nation."
KIEFFER.—"Recollections of a Drummer Boy."
LEFFERTS.—"Noted Pennsylvanians." (Fulton, Baldwin, Mott.)
LODGE AND ROOSEVELT.—"Hero Tales from American History."
MABIE.—"Heroes Every Child Should Know." (Lincoln, Lee.)
MACE.—"Lincoln, the Man of the People."
MAULE.—"The Boy's Book of New Inventions."
MCKIM.—"The Soul of Lee."
MEADOWCROFT.—"The Boy's Life of Edison."
MORRIS.—"Heroes of the Army in America." (Grant, Lee.)
MORRIS.—"Heroes of Progress in America." (Whitney, Fulton, McCormick, Morse, Edison, Mott, Lincoln, Barton, Willard.)
MOWRY.—"First Steps in the History of Our Country." (Fulton, Morse, Edison, Lincoln, Grant, Lee, McKinley, Barton.)
NICOLAY.—"The Book of American Wars."
NICOLAY.—"The Boys' Life of Ulysses S. Grant."
PAGE.—"Two Little Confederates."
PARTON.—"Captains of Industry (Second Series)." (Morse and Cornell.)
PERRY.—"Four American Inventors." (Whitney, Fulton, Morse, Edison.)
ROTHSCHILD.—"Honest Abe."
SPARKS.—"The Expansion of the American People."
STEVENS.—"The Story of Our Navy."
STRACHEY.—"Frances Willard."
SUTCLIFFE.—"Robert Fulton."
SWEETSER.—"Ten American Girls from History." (Barton.)
TOWERS.—"Masters of Space." (Morse, Bell.)
WHIPPLE.—"Young Abraham Lincoln."

INDEX

A

Abolitionists, 149, 259
Adirondack Mts., 40, 337
Alabama, 159
Albany, N. Y., 32, 40, 47, 289, 333
Alexandria, Va., 267
Allston, Washington, 83
Anti-slavery societies, 149
Antietam, 299
Appalachian Mts., 38, 66
Appomattox, 244, 249, 281
Arbitration, 295
Arc-light, 135
Arlington, Va., 267, 282
Armenia, 317
Arthur, President, 316
Atlantic cable, 112

B

Baldwin, Matthias, 59
Baltimore, 53, 94, 221, 313
Baltimore & Ohio R. R. Co., 54
Barton, Clara, 311–319
Baton Rouge, La., 190
Battery Place, N. Y., 34
Beecher, Catherine, 164, 323
Beecher, Henry Ward, 178
Beecher, Lyman, 160
Bell, A. G., 99–115, 124, 130
Bell Telephone Co., 113
Belmont Mansion, Phila., 63
Belmont, Mo., 242
Birmingham, Eng., 22
Black Hawk, 196
Bluegrass Country, 180
Blue Ridge, 68, 249
Bonds, government, 261
Boone, Daniel, 38, 179
Booth, J. Wilkes, 224
Bordentown, N. J., 27, 60
Boston, 84, 101, 123, 146, 164, 169
Bowdoin College, 167
Brazil, 102, 344
Brunswick, Me., 167
Bryan, Wm. J., 303
Buchanan, James, 213
Buffalo, N. Y., 42, 46, 117, 285, 308, 337
Bull Run, 262
Bunker Hill Monument, 52
Burnside, Gen., 219
Buzzard's Bay, 294

C

Cadet, West Point, 232, 268
Caldwell, N. J., 284
Camden & Amboy R. R. Co., 60
Canals 23, 38, 167, 259
Canal Zone, 341
Canton, O., 300
Capitol, The, 91, 205, 277
Carroll, Charles, 55, 67
Catskill Mts., 40
Centennial Exposition, 110, 129, 135

Central Park, 96
Champlain, Lake, 49
Chemistry, 118
Chicago, 75, 78, 294, 323
Cincinnati, 74, 264, 229
City Point, Va., 248
Civil Service Reform, 292, 303, 334
Clark, Geo. Rogers, 38, 191
Clay, Henry, 197
"Clermont," The, 30, 52, 266
Cleveland, Grover, 255, 284–296, 303, 307, 333
Cleveland, O., 76, 285
Clinton, De Witt, 38–51, 117, 257
Columbia College, 41
Columbia River, 236
Columbia, Pa., 63
Concord, N. H., 85
Conestoga Creek, 19
Connecticut, 160
Conservation, 338
Cooke, Jay, 257–265
Cooper, Peter, 56
Corlear's Hook, 29
Cotton, 1–3, 7–14, 149
Cotton-gin, 8–14, 77
Cradle, grain, 69, 78
Crum Creek, Pa., 52
Cuba, 263, 303, 317, 335

D

Davis, Jefferson, 213, 216, 223, 248, 274
Decatur, Ill., 192
Declaration of Independence, 55, 150
Delaware River, 26, 30
Detroit, 120
Dewey, Admiral, 306, 308, 335
Dom Pedro, Emperor, 102, 112
Douglas, Stephen A., 203, 210
Duluth, 263

E

East River, 29, 30, 34
Edison, T. A., 116–143, 290
Ellicott's Mills, Md., 55
Ellsworth, Annie, 93
Emancipation Proclamation, 221
"Empire State," The, 49
England, 23, 295
Erie Canal, 42–51, 63, 85, 117, 284, 311
Erie, Lake, 41, 46, 75, 117, 257
Evanston, Ill., 323
Everett, Edward, 221

F

Films, 140
Fitch, John, 26
Flat-boats, 188
Florida, 74, 177, 317
Fort Sumter, 157, 213, 239, 298, 313
France, 23, 38, 315
Franklin, Benj., 21, 96, 134, 262
Franklin Institute, Phila., 91
French Creek, Pa., 147
Fugitive Slave Law, 168
Fulton, Robert, 16–37, 38, 42

G

Galena, Ill., 238, 250
Garfield, James A., 253, 292, 316
Garrison, Wm. Lloyd, 152
Gas, 134
Geneva Treaty, 315
Gentryville, Ind., 187
Georgetown, O., 229

Georgia, 6, 12
Germantown, Phila., 60
Gettysburg Address, 221
Gettysburg, Battle of, 177, 221, 244, 279
Girard College, 231
"Glenmont," 138, 342
Goethals, Col., 342
Gorgas, Dr. Wm. C., 341
Gramophone, 139
Grant, U. S., 221, 224, 228–256, 263
Graphophone, 139
Great Lakes, 40, 263
Greene, Mrs., 6
Greene, Nathaniel, 6
Guineas, 11

H

Hamilton, Alexander, 36, 41
Hampton Institute, Va., 159
Harmonic telegraph, 108
Harrisburg, Pa., 62, 156, 164, 231, 278
Harrison, President, 293
Hartford, Conn., 164
Harvard College, 332
"Harvester," the Virginia, 78
Hayes, President, 133, 302
Henry, Joseph, 106
Henry, Patrick, 12
Henry, William, 20
Highlands, the, 3
Hooker, General, 219, 244
Hudson River, 26, 41, 49, 231, 255

I

Illinois, 75, 191, 199
Illinois River, 193
Incandescent lamp, 137
Inclined planes, 23, 63, 167
Independence Hall, 214
Indiana, 75, 181
Iowa, 75
"Ironsides, Old," 60

J

Jackson, Andrew, 197, 268, 292
Jackson, "Stonewall," 219
James River, 74, 276
Jefferson, Thomas, 11, 12, 29, 34, 74, 144, 147
Jersey City, N. J., 35
Johnson, Andrew, 250
Johnston, Gen., 246

K

Kansas, 78, 209, 214
Kentucky, 165, 158, 179, 203
Kerosene, 134
Kinetoscope, 140
King's College, 41

L

Lafayette, Marquis de, 48, 86
Lancaster, Pa., 16
Lane Theological Seminary, 164
Lee, Gen. R. E., 219, 235, 246, 266–283
Lefferts, General, 126
Lehigh River, 52
Leiper, Thomas, 52
Lexington, Va., 71, 282
Lincoln, Abraham, 78, 176, 179–227, 248
Lint, 3
Litchfield, Conn., 160
Liverpool, 86
Livingston, Harriet, 32
Livingston, Robt. R., 25, 42, 46
Lockport, N. Y., 47

London, 54
Louisiana, 144, 235
Louisville, 179

M

Madison, James, 12, 42
"Maine," The, 305, 317
Manila, 306, 335
"Marriage of the Waters," 48
Maryland, 278, 299
Massachusetts, 3, 12, 205, 311
Mason and Dixon Line, 213
Mauch Chunk, Pa., 52
McClellan, General, 219, 276
McCormick, Cyrus, 68–80, 149
McGregor, Mt., N. Y.,
McMichael, Morton, 154
McKinley, Wm., 297–310, 334, 337
Meade, General, 221, 244, 278
Meadville, Pa., 298
Menlo Park, N. J., 127, 137
Mexico, 235, 249, 270
Michigan, 75
Milan, O., 117
Military Academy, U. S., 40
Miniatures, 82
Minnesota, 80
Mississippi River, 74, 221, 238, 269, 317
Missouri, 75
Mohawk River, 40, 42, 49
Mohawk Valley, 40
Monroe, James, 12
Morris and Essex Canal, 23
Morristown, N. J., 89
Morse, Saml. F. B., 82–97
Motion Pictures, 139
Mott, James, 147, 173
Mott, Lucretia, 144–159
"Mulberry Grove," Ga., 6

N

Nails, 4, 148
Nantucket, 144
Nautilus, 25
Nebraska, 78
Newark, N. J., 127, 284
New Haven, 5, 14, 85, 163
New Orleans, 34, 74, 188
New Salem, Ill., 193
New York City, 49, 76, 78, 85, 154, 255, 285
New York University, 89
Niagara Falls, 308
Norris, William, 65
Northern Pacific R. R., 263
North Carolina, 2
North Dakota, 78, 333
North River, 30, 34, 255

O

Ogden, William, 76
"Ogontz," 263
Ohio, 49, 75, 148, 166, 229, 257
Ohio River, 74, 179, 181, 188
Oklahoma, 2
"Old Ironsides," 60
Old York Road, 156, 260, 265
Ontario, Lake, 41
Orange Mts., 137
Oregon, 236
Oyster Bay, L. I., 331

P

Packet-vessel, 6, 86
Panama Canal, 51, 339
Pan-American Exposition, 308
Paris, 137
Paulus Hook, N. J., 35
Peale, Charles W., 21
Peale, Franklin, 59

Pedro, Dom, 102, 112
Pennsylvania "Freeman," 151
Pennsylvania Hall, 151, 259
Pennsylvania R. R. Co., 66
Perth Amboy, N. J., 60
Petroleum, 134
Philadelphia, 26, 49, 231, 250, 258
Philippine Islands, 306, 308
Phoenixville, Pa., 148
Phonograph, 131, 139
Phosphorus, 121
Photographs, first, 91
Pickett's charge, 279
Pittsburgh, 34, 66, 167, 231, 259
Planes, inclined, 23, 63, 167
"Platform," political, 150
Plunging-boat, 25
Poland, O., 298
Port Huron, Mich., 118
Porto Rico., 306, 308
Potomac River, 53, 216, 266, 277
Poughkeepsie, N. Y., 146
Princeton, N. J., 41, 296
"Public Ledger," 154
Public schools, 146
Pullman, George, 121

Q

Quill pens, 185
Quincy, Mass., 52

R

Railroads, 49
Reaper, 69
Red Cross, 315
Relay House, Md., 57
Republican Party, 209
Rhine, River, 316
Rhode Island, 12
Richmond, Va., 74, 219, 223, 242, 248
Rochester, N. Y., 47
"Roadside," 156
Rome, N. Y., 43, 45
Roosevelt, Theodore, 306, 318, 330-345
Rough Riders, 317, 336
Russia, 317, 339

S

Salem, Mass., 103
Sandusky, O., 257
Sandy Hook, 48, 87
San Francisco, 177, 252
Sangamon River, 193
San Juan Hill, 317, 337
Santiago, Cuba, 306
"Savannah," the, 34
Savannah, Ga., 6
Schuylkill River, 63
"Scientific American," 132
Scottsville, Va., 74
Scott, Gen. Winfield, 213, 270
Secession, 213
Seine River, 27
Seneca River, 45
Seward, Wm. E., 205, 244
Shenandoah Valley, 299
Sheridan, Gen., 248, 300
Sherman, Gen., 223, 244
South Carolina, 6, 12, 212
South Dakota, 78, 333
"Spoils system," 292
Springfield, Ill., 201, 207, 226, 240
St. John's River, 177
St. Louis, 76, 234, 237, 258
Stage-coach, 5, 85
Stamp Act, 3
Stanton, Edwin, 78, 206, 218
Stanwix, Fort, 43
Staunton, Va., 73

Steam-battery, Fulton's, 35
Stephenson, Geo., 56
Stowe, Harriet B., 160–177, 219, 320
Submarine boat, 25, 37
Summit Hill, Pa., 52
Sumter, Fort, 157, 213, 239, 298, 313
Susquehanna River, 279
Syracuse, N. Y., 284

T

Tacoma, Wash., 263
"Tad" Lincoln, 216
Taft, President, 343
Tariff, 292, 302
Taylor, Zachary, 205
Telegraph, 87, 100, 106, 116, 250
Telephone, 106, 124
Temperance Crusade, 324
Tennessee, 244
Texas, 2, 235, 270
Thomas, Gen., 244
Thomas, Philip, 54
"Tom Thumb," 56
Torpedo, 24, 37
Tramways, 52
Trinity churchyard, 36, 85
Tuskegee Institute, 159

U

"Uncle Tom's Cabin," 171
Underground R. R., 169

V

Vacuum, 136
Vail, Alfred, 89, 113
Vail, Theodore, 113, 115
Van Buren, President, 91
Venezuela, 295
Vicksburg, 223, 242, 279
Vincennes, Ind., 191
Virginia, 68, 159, 168, 216, 274

W

Wabash River, 191
"Walunt Grove," 68
War of 1812, 14, 43, 68
Washington City, 86, 91 106 133, 171, 205
Washington, George, 11, 40, 82, 216, 274, 296
Washington Monument, 216, 319
Washington Square, 89
Washington and Lee Univ., 283
Watt, James, 20
Watson, Thomas, 108
W. C. T. U., 325
Western Union Tel. Co., 123, 130
West, Benjamin, 20, 84
West Indies, 163
West Point, 40, 230, 242, 250, 268
West Virginia, 274, 278, 299
Whale oil, 134
Wheeling, O., 164
Whig party, 209
White House, 216, 244, 268, 277, 291
Whitney, Eli, 1–14, 56, 77, 88, 148, 311
Whittier, J. G., 150
Willard, Frances E., 320–328
Wilson, President, 73, 114, 296, 344
Wisconsin, 320
Wolf, Gov., 62

Y

Yale College, 5, 82
Yorktown, 40